**The Prime Directive:**

The prime directive of civilization is to organize labor and resources into systems and institutions that optimize the scientific, productive, and human well-being outputs. The goal is to organize an iterative civilization, which treats human civilization like an engineering problem.

The inputs: Mass, energy, labor, and intelligence.

Are fed into a system: Economic, financial, scientific, military, political, legal, regulatory,

cultural, religious, belief & identity, and world view & attitudes systems

and institutions.

To produce the civilizational outputs: Science, production, and human well-being.

Then have a feedback loop of measuring the outputs in real-time, then use that data to change the inputs and systems to improve the outputs. This iterative systems approach is a tried and true method. Engineers use it to make better products, scientists use it to conduct experiments, and so we can use it to improve human civilization. Conducting our civilization using scientific and engineering principles, rather than the insanity we are doing now, would be one of the best ways to improve mankind.

This document proposes why labor and resources are the inputs, the systems and institutions make up the system, and science, production, and human well-being are the outputs for human civilization. This document also goes over how the civilizations that inadvertently pursued the prime directive won, the broad patterns and rhythms of human history, human nature, why the world is in its current state of affairs today, a pragmatic application of an iterative systems approach to improve our current civilization, and a techno-optimist vision of the future.

Civilization, like anything else, has inputs, the inputs are put into the system, and the system produces outputs. Over the course of human history, so many people thought so many things were important. What tangibly mattered, was how well your society performed in its scientific, productive, and human well-being outputs. These are what differentiates the hunter-gatherer societies, ancient Egyptians, the Romans, and the pre-industrial age to today.

The nation that produced lots of food, a lot of materials, and great organizational structure often made great cities, generated great science and culture, and great armies. With these it would outcompete its neighbors in the same region and maybe if they were great enough, dominate whole swaths of the continent. History has been about who can organize mass & energy into the right system conducive for the best armies, the best cities, the best culture, the best whatever that is needed to make the civilization strong. When we try to understand why notable civilizations like the ancient Egyptians, Chinese, and Romans became great there must be a confluence of variables in play. It wasn’t just geography, genetics, or randomness. There must be a concise set of inputs that led to the output. There must be some confluence of factors, each weighted differently, that all interact with each other condensing into some value(s) where, after surpassing a certain threshold, that civilization becomes great. Sometime during our lifetime, an insidious idea settles in that civilization just exists and it’ll always be there. This is not true. A lot of people over a long period of time had to work really hard to build the civilization we get to enjoy right now and if the right inputs are not maintained, then the output will be the fall of your civilization. This is what happens to a society that becomes too successful for too long. It forgets everything that made it great in the first place, then the people become decadent and degenerate, and then the civilization declines then falls. This has happened to almost every civilization in human history and is what’s happening to Western civilization right now. It rose during the 1500s, industrialized and hit its zenith in the 1800s, then begun its decline after WW1 and WW2, and have been in stagnation/decline since then. (Obviously, this doesn’t fit America’s timeline but now it too is in decline) Its the classic story of the poor kid works hard, makes it big, then his children become spoiled brats and spends daddy’s money, then by the time the grandkids come around the family is broke and learns that money is hard to earn and harder to keep. This principle works exactly the same way for civilizations. It is absolutely essential, for the good of civilization, for its population and elites to have it seared onto their brains and embedded into the culture, that their civilization will degenerate and die if they don’t uphold the civilizational inputs that keep it running well. Neglecting history, anthropology, and human nature in the education systems is foolish, young adults are sent out into society essentially blind, accelerating civilizational decline. Civilization, like anything else, has inputs and outputs. If you provide the wrong inputs, the output is civilizational decline. But if you provide the right inputs and most importantly, maintain those right inputs for long periods of time, the output is a great civilization.

It’s useful to view society, civilization, and human history as a system of understandable and measurable inputs and outputs instead of this mysterious, random black box most of us mentally frame it as. The inputs are mass & energy and the output we want is a better civilization and that consists of some optimal level of scientific, productive, and human well-being outputs. Our civilizations today are far superior to the ones thousands of years ago by every conceivable metric. Our technology is far more advanced, we have far more material comforts, fewer wars, ½ of our children aren’t dying by the time they’re 18, etc. What’s the difference between the ancient Chinese, the Romans, and medieval Europe to China, Italy, and Europe today? Human nature is the same, the genetics are the same, the geography and climate are the same, even the culture is fundamentally the same. The main difference between our civilizations is the level of science, production, and human well-being. Electricity, air conditioning, medicine, and computers are pretty nice. So are the mines, refineries, and factories that mass produce these technologies into usable form. These things are what really constitutes progress. When we say humanity has advanced from its stone age past, we are really talking about the differences in these three outputs. As for human well-being, the average person’s life, at least in the developed world, is unbelievably better than before. Back then, the average peasant had no weekend, bent down, planted seeds, and harvest crops by hand sun up to sun down, lived at a subsistence level, rarely ate meat, ½ of your children died before reaching 18, very little social mobility, your occupation was predetermined at birth, constant uncurable diseases killing friends and family, the random drafting of sons and fathers to war, the occasional barbarian or invading army killing your entire village, raping all the women, and selling the survivors into slavery. I mean, it just wasn’t a great time for the average person. The average human well-being today is far, far better. Also, history shows that whenever the general population reaches a certain threshold of unhappiness, that society experiences revolutions and civil wars, nullifying many of the gains in the scientific and productive outputs. The Industrial Revolution was great for civilization’s scientific and productive outputs, but how beneficial is it to civilization really if its people are working 16 hours a day, 6 days a week in awful working conditions. There is a direct inverse relationship between how hard the individual works/gets paid and the performance of the larger organism. Imagine if all the cells in your body suddenly wanted fewer work hours and increased pay, that would greatly hurt you the larger organism. Ultimately, civilizations are for human beings and maintaining good human well-being is a moral good. There is some optimal balance between the scientific, productive, and human well-being outputs. However, note that the output is human well-being, not necessarily human happiness. It’s possible to hook people up into machines directly manipulating the biochemistry in the brain to emit the happiness emotions and lock them up in a box. That would just be maximizing the happiness outputs, not genuine human well-being. This is probably the most vague civilizational output since human well-being, under human nature today, encompasses happiness, community, physical and mental satisfaction, sense of purpose, sense of accomplishment, a belief system, a healthy self concept and self confidence, a degree of self reliability and independence, etc. The goal is to improve civilization and that is done by improving civilization’s scientific, productive, and human well-being outputs.

By setting the scientific, productive, and human well-being outputs as the clear goal, it’s much easier to gauge what the system should do with what inputs. What is the best way to get our mass & energy and what should we do with them to get the outputs we want? That’s what civilization is, a mechanism that configures and organizes mass & energy into systems best suited to produce the optimal civilizational outputs. Determining what systems and institutions are best for society, is a question humanity has been iteratively trying to answer for all of human history. Every government, political & economic system, religion, philosophy, and culture ever implemented was that society’s attempt at answering that question. Individuals learned to work together, form tribes, form civilizations, social structures, taxes, bureaucracy, religion, a professional army, markets, trade, Confucianism, feudalism, capitalism, monogamy, the Catholic Church, separation of powers, democracy, academia, etc. These are all experiments our species conducted within their respective societies, whether consciously or subconsciously, to find new local optimas for organizing mass & energy into systems and institutions that might help the society survive and reproduce. Evolution isn’t strictly for biological organisms. If you look at a tree map of different civilizations throughout history, it looks similar to an evolutionary tree. Civilizations developed traits, tested them in the real world, and would adapt them to better fit their environment and compete with other civilizations. The civilizations with better traits survived, beat its competition in the area, and reproduced. The civilizations who developed deficient traits, died off or were conquered, and did not reproduce their culture and society. Whether a civilization develops capitalism and free markets or an organism develops a heart and circulatory system, in the end they do the same thing, organize mass & energy into systems and institutions to help the larger entity survive and compete.

A civilization’s systems and institutions are arguably the most important component to a civilization’s performance and trajectory. China had a powerful Confucian bureaucracy where government posts were the elite positions and only achieved by doing well on imperial exams. These scholarly elites actively scorned the merchant class. Merchants were ranked lowest in the social hierarchy, below scholars, farmers, and artisans. The excuse was that merchants don’t produce anything, just move things around, but really it was envy and fear. Some merchants became extremely wealthy and held considerable influence, posing a threat to the bureaucracy. Yet, for most merchants their ultimate goal was often to move their family into the scholar official class over generations. They often aspired to leave trade behind and elevate their family's social status through the imperial exam. Eventually, it became that the main outlets for smart, competitive, ambitious children were confined to the bureaucracy, scholarly works, or military. This leads to a basic civilizational principle: when a dominant force has no real rival to compete with, it starts doing stupid stuff. (Of course the aristocrats competed with each other and the emperor and there were eunuchs, but they were all within the same bureaucracy, sort of like Democrat and Republican politicians being part of the same bureaucracy.) In the early 1400s, Admiral Zheng He led massive treasure fleets on diplomatic and trade missions across the Indian Ocean under the Yongle Emperor. After Yongle’s reign, the Confucian bureaucrats, who were deeply skeptical of maritime trade, gained power and stopped the voyages by the mid 1400s. The Ming court issued haijin (sea bans), which restricted private maritime trade and criminalized overseas travel. They even went as far as burning ships and dismantling shipyards. Compare this to Europe and what led to their Age of Exploration. Although European states had bureaucracy, they were in constant competition with all the other European powers. Spain would’ve never burned their ships because that’d mean those darn Portuguese, Ottomans, and English would take your share of the seas and make themselves wealthier and more powerful than you with the trade routes you used to own. European kings and bureaucrats too held disdain against their merchant class going as far back as the Middle ages, but it was better to work with them than letting those damned French take all the gold for themselves. The ruling elites were forced to work with merchants out of pragmatism to finance wars and collect taxes. Through intercompetition, it turned out the ability to raise and sustain financial resources increasingly determined military success. States had to adapt and develop new traits such as charter monopolies, mercantilism, and banking to survive. The states that developed the better traits beat the local competition and became dominant while the states that didn’t became weak. The entire history of Europe can be described as a never ending competition to find ways to one-up another. China did not have this dynamic. When they were unified, there was no one in the area that could challenge them so they could afford to do ridiculous things like shut down the entire merchant class, burn the entire merchant fleet, and ban everyone from sailing. The Dutch East India company (VOC 1602 - 1799) didn’t just randomly appear one day when a bunch of guys at a bar had the bright idea of shipping spices. The Dutch government actively wanted to break the Iberian monopolyon spices and Asian goods (Spain and Portuguese briefly united 1580 - 1640). Before the VOC, there were dozens of competing Dutch merchant companies, all trying to trade with Asia. They undercut each other, inflated prices, and weakened Dutch bargaining power. The Dutch government merged them into one mega company to unify strategy, reduce competition, and strengthen naval presence. The VOC, the first "modern" joint-stock company, and the world’s first stock exchange were both formed in 1602 to compete with the Iberians. Dutch civilization developed this new trait as an adaptation for survival, discovering a new local optimum in commerce. It’s similar to the Arctic fish that developed antifreeze proteins to prevent its blood from freezing in subzero temperatures, discovering a new local optimum in Arctic survival. Under this new arrangement of systems and institutions, the Dutch people became one of the wealthiest societies in the world for a while. This is a fine example of labor and resources organized into systems and institutions that optimized the scientific, productive, and human well-being for the Dutch people. A great civilizational net positive act by the Dutch government.

Other notable historical examples showing how organizing labor and resources into the right systems and institutions makes all the difference:

China’s Path To Industrialization:

During the Han (200 BC - 200 AD), Tang (618 AD - 907 AD) and Song (960 AD –1279 AD) dynasties China had iron blast furnaces and mass produced steel. The Chinese used water powered bellows (water mills) for mechanical movement and coke (coal with impurities removed) or charcoal to fuel the blast furnaces. By the Song dynasty they easily had the world’s most advanced and largest iron and steel industry. They were centuries, if not a thousand years ahead, yet the Europeans caught up and industrialized first in the 1700s - 1800s. It sounds like China already had all of the prerequisites for an industrial revolution around 1000 AD: an excess workforce, large domestic consumption, advanced metallurgy, water power machinery, coal mining, advanced markets, and trade networks. Historians have wrestled with this for decades. The explanations may not be conclusive, but still useful when pieced together. The glaringly obvious culprit, the bureaucracy, just like with the treasure fleets, shut down private iron production during the Ming dynasty. Iron was considered too dangerous to be in the hands of merchants or private citizens because it could be used to make weapons. Blast furnaces were dismantled or banned in many regions. Confucian bureaucrats viewed ironworking and profit seeking as low status occupations and discouraged technological progress in industries seen as morally questionable or destabilizing. The Ming prioritized agriculture, centralized state control, social harmony, and stability. Other arguments from Chinese academics: China didn’t need machines because cheap and abundant labor worked well enough. Industrialization requires capital intensive development, which wasn’t economically necessary or efficient in historical China. Confucianism prioritized moral cultivation and social harmony over technological experimentation. China actually did have a proto-industrial economy, but lacked the energy and technological revolution that happened in Europe. Whatever the real reasons were, Chinese civilization did not organize labor and resources into the right systems and institutions to facilitate an Industrial Revolution. Again, there must be some confluence of factors, each weighted differently, all interacting with each other condensing into some value(s) where, if it surpasses a certain threshold, the civilization industrializes and develops. China finally hit that threshold and started industrializing a few years after Deng Xiaoping’s reforms in 1978, 2 years after Mao finally died. The reforms basically introduced capitalism and free markets. It legalized private businesses, private ownership, moved away from central planning to market based pricing, reopened universities, opened up China to foreign direct investment, replaced collective farming with private family based farming contracts, etc. Within 47 years it went from a poor agrarian state to one of the most powerful states in the world on par, if not exceeding the United States in economic and military might. After thousands of years, China industrialized only after organizing its labor and resources into the right systems and institutions that optimized the scientific, productive, and human well-being outputs. Granted, the west was already industrialized and China had someone to learn from, but they still didn’t industrialize from 1912 - 1978 because they still didn’t have the right systems and institutions then. A mere stroke of a pen, a few paragraphs on a piece of paper signed by the right people, and a billion people rose out of poverty. That’s not an exaggeration either. China now vs China before had the exact same genetics, the exact same geography, and the exact same land and resources under their feet. Quite literally the only difference was how people in that civilization decided to organize themselves into systems and institutions (and a burning desire to rise out of poverty). Imagine if China never implemented capitalism and free markets. Today there’d be some malnutritioned child picking rice from a field, wondering why things have to be so shitty, why things are this way. Imagine finding out the only thing between your shitty life and wealth were a couple of guys getting together and signing the right paragraphs on a piece of paper into law.

England’s Path To Industrialization:

Despite China’s 500 year headstart, England was the first to industrialize in the 1700s and 1800s because their systems and institutions allowed it to reach the industrialization threshold a lot earlier. There were many factors that allowed England to break through the threshold, but there were two notable keys to England’s success: a competing plurality of powers and statutory patents. To explain the first key, in stark contrast to the relatively unrivaled Chinese bureaucracy, England’s power structure was divided between the monarchy, Parliament, nobility, the Church, and towns. Something about the English character made them exceptional in how early and how far it went in limiting monarchical power and institutionalizing representative government. This plurality of competing powers, likely reinforced by the individualistic European character, slowly built up beneficial civilizational traits such as limiting royal authority and building up the legitimacy of Parliament through hundreds of years (From the Magna Carta 1215 to the Glorious Revolution 1688 - 1689). These are such rare anomalies in human history. Few societies developed enduring, formal mechanisms like these before the modern era. As for the Church and its influence, most people don’t digest how powerful the Catholic Church was during this era. It was the most powerful institution in Europe for a thousand years, from the fall of the Western Roman Empire (476) to the rise of the Spanish Empire (1500s). It was the largest landowner in Europe, at one point holding 25% - 30% of all land in Western Europe and collected tithes from many Christians. It acted as a protectorate of society’s collective psychological health, influencing all aspects of life from daily prayer, baptism, morality, and marriage. It crowned and legitimized kings and intervened in politics. It had its own legal code and courts, its priests and monks were immune from secular law, and formed its own inquisition to combat heresy. The Catholic Church’s role in shaping Europe can not be understated.

Catholic Church Tangent:

One of the most egregious misconceptions entrenched in modern culture is the idea that the Catholic Church was detrimental to Europe’s development. That without the Catholic Church, science and technology would’ve emerged hundreds of years earlier. This is so comically false that at this point, one is left questioning the character of the Renaissance & Enlightenment men who spread this absurd, insidious lie. After the fall of the Western Roman Empire, the Catholic Church kept literacy, education, and science going in Europe during the Dark Ages. Literacy was so rare, most nobles and kings were illiterate and depended on church scribes and monks. King Charlemagne (742 - 814) only learned to read as an adult through deliberate effort but still never learned to write. Monasteries and cathedral schools preserved classical Greek and Roman texts and even introduced Arabic science and philosophy into Europe. It founded or sponsored most of Europe’s first universities, by 1500 over 80 universities existed in Europe and most were Church affiliated (although they largely operated independently). The Church was a patronage of science, funding astronomical observatories, promoting scientific education, physics, and mathematics. Early scientists were literally part of the Catholic clergy or trained by the Church including Roger Bacon, who promoted strong empirical research through observation and experimentation and Copernicus, who developed the Heliocentric theory. It was even the main welfare provider before modern governments, providing hospitals, orphan care, food & shelter for the poor and travelers. The Catholic Church’s single most important legacy is ensuring the birth of the Scientific Revolution by making disciplined inquiry into the natural world theologically legitimate. God created the world, therefore studying the world is worshiping God. God is rational, therefore the world he built must operate with underlying truths that could be discovered and understood. These tenants eventually led to the Scientific Revolution which laid the foundation of the modern world we all enjoy today. The fact that the most powerful institution in Europe actively encouraged building ideas through empirical and objective observations meant no matter the political or economic landscape, no matter what some king said or what the popular idea was at the time, the belief that the world can be logically understood was anchored onto the soul of European intellectuals for a thousand years. There’d be little scientific discussion during the Renaissanc and Enlightenment years if the Catholic Church did not give science its blessings. If the Church persecuted scientists and the Inquisition deemed them heretics, that sentiment would’ve trickled down to the kings, nobility, and then the commoners of Europe. The entire European culture, which was intricately woven with religion, would not have been conducive to the scientific output. The importance of institutional religious support for science is further reinforced by seeing what happened to the Islamic world during their Golden Age, but more on that later. The Catholic Church was unequivocally a net positive institution for Europe’s scientific output.

Anyways, so yes, the Catholic Church was a serious competing force in English society, along with the monarchy and nobility. Along with these, towns also held notable power in English society due to the strength of the merchant class, capitalism, and Parliament. Towns functioned as corporate hubs whose fiscal indispensability and parliamentary representation made them a structural counterweight to the centralized ambitions of monarchy, the landed dominance of the nobility, and the ecclesiastical hierarchy of the Church. Many English towns had direct parliamentary representation for centuries, and the more substantial and autonomous among them actively lobbied to shape legislation, taxation, trade policy, and religious settlement. The monarchy, nobility, Parliament, Church, and towns, these made up the competing plurality of powers in England. Now to England’s 2nd key to success, the statutory patents. These intercompeting powers gave England a dynamic political and economic landscape preventing any single institution from holding too much power over society like the Chinese bureaucracy did. These competing institutions were then incentivized to build strong legal systems to mediate issues between themselves. Rather than a centralized legal machine, it was a network of interlocking jurisdictions generating predictable and fair adjudication according to the rule of law, not the whims of kings and nobles. England’s distinction was that even the most powerful institutions and elites had to follow along with the law to a much higher degree than the rest of Europe. This new trait allowed England to break out of the local optimum the rest of Europe was plateauing into.

The landscape of commerce in 16th and 17th century Europe were crowns granting exclusive charters to privileged companies to organize certain high‑risk, long‑distance valuable trades (spices, furs, sugar, slaves) to compete with other European state champions, while most domestic intra‑European commerce still ran through competitive markets, guild systems, and regional merchants although they still faced commodity monopolies. In England, enterprises like the East India Company had exclusive trade rights with India and Southeast Asia and commodities like salt, iron, soap, glass, coal, vinegar, cards, starch, and tin were all monopolies granted by the monarchy. This squeezed out smaller merchants and traders, centralized capitalism, stifled innovation, set prices artificially high, and was a contributing factor to the English Civil War (1642-1651). This local optimum in commerce allowed your state champion to compete with other Euroepan state champions on various grounds like the East Indies spice trade or building plantations in the Americas. It was great for monarchies since anyone who wanted to do serious business needed the king’s favor. However, this came at the expense of change and iteration. Inventors and innovators needed the crown’s approval to commercialize their machines, greatly hampering the pace of improvement. Imagine today if the only way to commercialize your new product was through the explicit grace of the president or congress. The overseas trading companies may have adopted sailing and navigation innovations because they were competing with each other, but within local markets there were few incentives to build better machines since legalized monopolies blocked out new entrants to commodity markets. Even if inventors and innovators wanted to work with monopolies, there was no legal protection preventing companies from stealing the designs and not paying the original creator a dime. There were just layers and layers of entrenched elite interests fiercely protecting their share of various markets. At a civilizational level, these dynamics were not a good set of systems and institutions for the scientific, productive, and human well-being outputs for the entire European continent.

The English jurist, judge, and politician Edward Coke (1552 -1634) famously despised these monopolies and centralized power. He campaigned to subject the English crown to law and was hugely influential in forming the Statute of Monopolies (1624), laying the foundations of the statutory patent system. The Statute of Monopolies is when centuries of plurality and competition finally came to bear fruit.It declared almost all existing commodity monopolies void (overseas charter companies were exempt for national strategic reasons), banned the crown from granting monopolies in the future, gave courts the authority to police monopolies, and carved out the legal system’s right to grant patents up to 14 years to the “true and first inventor” of novel inventions that provided some improvement or utility. This was a truly novel and critical social innovation. England was the first society to legally recognize ideas as personal property and enforce them through an impartial legal system. Before, most patents were issued by the monarchy, often requiring a high level connection, bribes, favors, or lobbying. Statutory patents, however, were issued and enforced through the legal system and courts. This critical distinction meant a low born peasant from the most remote region of England can come up with a new invention and without any permission from the monarchy, file a patent with the legal system, and no other entity, not the king, not the nobles, not the Church, no one else can steal that idea from him. With this change in the English system, inventors and innovators can now become entrepreneurs and profit from their own inventions. Granted, the statutory system was not great at first, often being inadequate and expensive. While it did have some ironing out to do, ultimately the new patent system brought England much closer to the industrialization threshold. If there was a bar between 0 to 100 where 80 was the threshold for the Industrial Revolution, removing the monopolies gave +20, the statutory patent system gave +15, strong legal system +10, the Agricultural Revolution greatly increasing farm productivity freeing excess labor for factories +5, accessible coal +5, the entrepreneurial spirit and individuality of the English people +5, and all the other factors +20 (shipping infrastructure, rivers, open markets, etc). Together, these factors brought England to the Industrial Revolution threshold, breaking humanity through the previous pre-industrial local optimum.

Thomas Savery’s engine, invented and patented in 1698, pumped water out of coal mines and became the first commercially successful steam power device. Thomas Newcomen’s atmospheric steam engine (1712) improved on Savery’s design, implementing pistons and cylinders, and pumped more water out of deeper mines (notice the dates 1698 and 1712 are exactly 14 years apart, the patent expiration date). By the 1750s a small heartbeat of an Industrial Revolution was forming. Since society distributed decision making and hard working, intelligent people didn’t need high level connections to make new inventions there was an early flowering. There was growth in the textiles, ironworks, and metal works industry. Water wheels became widely used. Early canal building began to link industrial centers then banks and joint-stock companies started to support business expansion. By 1776 Boulton & Watt installed and operated their first steam engine, dramatically improving Newcomen’s design.

Funny enough, even after the invention of more advanced steam engines, water wheels were still better for awhile, so many thought the best use case for steam engines would be pumping water upstream to later flow through a water wheel. Water wheels actually remained cheaper, easier to maintain, had no fuel costs, and more efficient than steam engines until the early 1800s. Similar dynamic with horse drawn power, although they were replaced earlier than water wheels.

The patent systems allowed these men to invent a machine or improve a previous design, financiers assured by the patent’s legal protections felt confident enough to invest capital, factories were built, products were sold to open markets, and people got rich.

Important caveat: Plenty of inventors didn’t patent and relied on secrecy, speed to market, or custom contracts because they were still relatively expensive and complex. For example, inventors needed separate patents for England, Scotland, Ireland, not to mention the rest of Europe. Also, yes the vast majority of the raw materials the British used during the late 1700s came from its colonies. Indian cotton accounted for over 75% of British cotton imports by the late 1700s.

Over time, an ecosystem of these inventors, financiers, and industrialists emerged. Boulton & Watt wanted better and faster ways to make their engines and then John Wilkinson invented precision boring machines to make better cylinders for the steam boilers. Henry Maudslay developed true precision machine tools and interchangeable bolts and screws, unlocking more sophisticated machines for the entire industry (Henry spent ten years experimenting with different gears and tools perfecting a process to cut very accurate screw threads. There are many other stories of engineers spending years perfecting this one piece of machinery or process). Once people realized immense wealth was being made, inventors, financiers, and industrialists were quick to work together to make designs and build factories as fast as possible to meet a market demand before someone else did. This ecosystem and momentum is how, what could have been a series of one off inventions, turned into a full blown Industrial Revolution. There were plenty of incumbent powers negatively affected by the influx of cheap and abundant goods. They sued, lobbied Parliament, sabotaged progress, and burned down factories, but the plurality of powers and a strong legal system kept the momentum of the Industrial Revolution going.

William Lee’s Story: Compare these inventors during this energetic time to William Lee, who had the misfortune of inventing the first stocking frame knitting machine in 1589. That same year he petitioned Queen Elizabeth I for a patent. She refused out of fear the machine would throw large numbers of poor knitters out of work (she wasn’t wrong). In 1598 he went back to the queen with a better design, she still refused. In 1601 he petitioned King Henry IV of France for a patent, he said yes, then William and his brother set up knitting workshops in Rouen. 1610 King Henry was assassinated, his successor Louis XIII (a 9 year old) and the new government withdrew support. It turned out without royal backing, the guilds blocked and slowed adoption of his knitting machines while others stole his designs. Also, there was no broad commercial ecosystem or industrial base to support mass textile production. Building, maintaining, and scaling these intricate machines became very expensive and his knitting workshops were never profitable even with royal backing. There was no ecosystem, no legal support, no energy or momentum. William was 200 years too early before society would become conducive for his machines. Eventually, his workshops closed down and died penniless in 1614.

The key benefit of a competing plurality of powers and statutory patents was giving individuals ways to break out of the current local optimum no matter how painful and disruptive it was to the status quo. Civilizations often run into this problem where it needs to enact change and adapt in order to improve or stave off disaster but human nature, the systems & institutions in place, and layers of entrenched interests all get in the way. We know the Industrial Revolution would be great for England but Queen Elizabeth didn’t want to displace her subjects, who were already living on sustenance wages, wide swaths of elites who invested into and benefited from monopolies would never willingly let them go, and guilds of skilled artisans and tradesmen (blacksmiths, weavers, carpenters, masons) would fight tooth and nail to protect their livelihoods (they held influence within local towns). What wealthy patron would invest in a factory for a machine that disrupts society unless there was some system and institution in place that could protect him from the aristocracy and guilds? What elite in their right mind would’ve let inventors, industrialists, and financeers irreversibly disrupt the entirety of English society? There was a 0% chance such large sweeping, uncontrollable change would’ve been approved by any elite governing body at the time. This was truly a unique time in history when individuals and enterprises, without any permission from the elites, can just make Spinning Jennys, water frames, and power looms and displace tens of thousands of workers despite the pushback from the established elites and guilds invested in the traditional cottage industry. They sued, lobbied Parliament, rioted, and burned down factories (Luddites) but the law held firm and by this time in English society, the courts were strong enough to enforce their decisions. This ability to have creative destruction is the iterative process and is a key element in forming the right systems and institutions to optimize the scientific, productive, and human well-being outputs. The long standing struggle between powers gave enough room for figures like Edward Coke to squeeze in the Statute of Monopolies into law through a legal system that again, only emerged, strengthened, and became respected to mediate legal issues or alliances between the competing plurality of powers.

It’s like a self reinforcing system, a competing plurality of powers form a legal system, over time the legal system strengthens so institutions can mediate conflicts or alliances between each other, and then that same legal system becomes a legitimate way for the organism that is English civilization to adapt to changes and iterate into new local optimums like statutory patents and strong legal systems, which helped it undergo the Industrial Revolution.

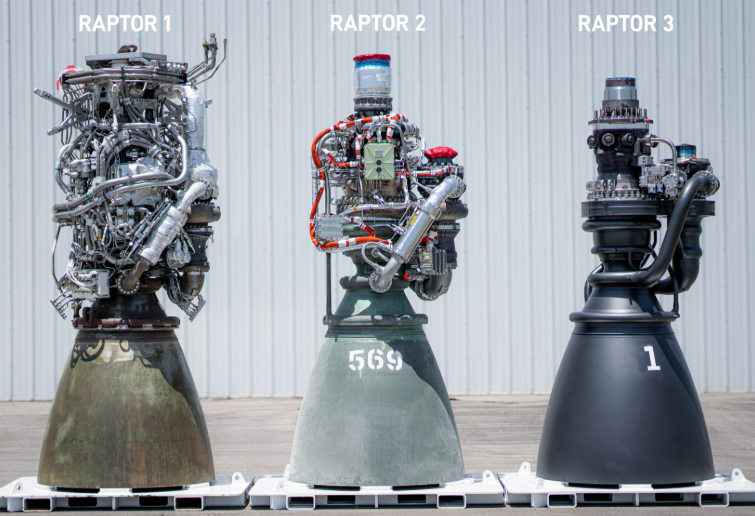
There is an argument that statutory patents increased the pressure to be profitable by forcing inventors to prove their invention's value in the marketplace quickly. Maybe if you are sponsored with a royal patent you’re not as focused on profitability as you can be. You’re flush with money, take things slow and steady, and kind of operate like a modern day government contractor.However, through private investment you better be profitable soon and it better work right away or you don’t get customers.Probably not really true but an interesting thought.

In summary, the Industrial Revolution was not a random occurrence, English society (without even knowing it) took a clear set of steps that led to the right organization of labor and resources into systems and institutions that greatly increased the scientific, productive, and human well-being outputs of society (admitedly the human well-being component came much later). The English had a plurality of competing powers between the monarchy, nobility, Parliament, the Church, and towns which incentivized building a strong legal system over time. That same legal system allowed society to invent useful social technologies like statutory patents, separation of powers, and a culture that respects the rule of law. Through these social mechanisms, England was able to iterate and reach new local optimums by providing fertile grounds for private innovation and entrepeneurship free of encumbant elite interests. England iterated while the rest of Europe (and the world) did not, and leveled up into the British Empire.

Is it any coincidence the same society that industrialized first became a global superpower? The sun never set on the British Empire by the late 19th century because their civilizational outputs, the scientific, productive and human well-being outputs earned them undisputed naval supremacy, a powerful army, a massive export economy, overseas colonies, control over trade, and dominance in global finance. They were also the 2nd to established a powerful central bank (Bank of England 1694), which was hugely important to England’s development and rise to power, but that’s another tangent for later.

Lets take stock of the main differences between the British Isles in 4000 BC and 1700 AD. The geography and climate were the same. The coal, iron, wood, and all the mass needed to make factories and steam engines were there. The laws of physics and human nature worked the same. Quite literally, the only difference is that a group of people settled the land and then organized themselves into the right systems & institutions that allowed them to learn how to dig up the right materials from the ground, arrange the atoms into the right structures, and then distribute them throughout their society to do useful work. Even when comparing 1000 AD to 1700 AD, the only thing stopping the Anglo-Saxons from industrializing was themselves. What England essentially did was increase their scientific, productive, and human well-being outputs by iterating through an intercompeting plurality of powers. Cheetahs competed with each other and Gazelles, and they all grew faster. Samsung and Apple competed with each other and the smartphones got better. There just seems to be this natural law where competing players force each other to iterate and improve. Of course, a plurality of power and competition are not the only ways to improve. Elon is the dictator of SpaceX and it has no real competition for its StarShip program, but they dramatically improved every part of it through an iterative process anyways. Whatever the methods, the key is to improve towards your objective function, and for civilizations that is to increase the scientific, productive, and human well-being outputs.

The Iterative Method:



Lots of organisms lived out their every day lives not knowing their individual or collective decisions would inadvertently lead to different evolutionary paths that may or may not end up being beneficial for survival when the environment changes. The men who enacted the Magna Carta or Edward Coke with the Statute Of Monopolies weren’t doing these things to build modern society, they were doing what their human nature limbic systems thought was the good thing to do, then their consciousness rationalized it, and then acted upon it. Several hundred years later, it turned out these societal adaptations and traits of plural and distributed power and property rights were great in reaching the Industrial Revolution thresholds, and their descendants ever since lived great comfortable lives relative to the ones who didn’t. Although now the British people, especially the elites, are suffering from the successful-for-too-long syndrome and are now degenerate & decadent, and now actively declining as a society. They’re now actively attacking internet anonymity and suppressing speech the government deems hateful. Eventually they’ll hit a lowpoint, the young will realize the mistakes and enact changes one way or another, if successful they will have good times, but over generations will degenerate and become decadent again, and then repeat the cycle. We’ve done this for all of human history, are doing it now, and probably keep doing it under our current form of human nature. Thus, this story of our insane, blindly progressing, and tumultuous human history continues unchanged.

Applications of The Prime Directive:

Accurate measurements of a civilization’s scientific, productive, and human well-being outputs act like gauges on a machine. It gives the reader accurate real time data on the state of society. Even more useful is measuring the delta, or the change, of these outputs over time. If the scientific and productive output this year was higher than last year, that’s great. But if at the same time, the human well-being output falls and is about to hit the lower bound of the tolerance range, civilization needs to fix it fast. Common issues when the human well-being’s lower tolerance level is breached includes revolution, civil war, and often regime change.

The Tsars had the misfortune of dealing with The Russian Revolution of 1917 in the middle of WW1 (1914-1918). Russia industrialized late (1880s–1900s) under Tsarist autocracy. Workers lived in slums, worked 12-14 hour days, and barely made a living. The urban workers endured extreme exploitation, peasants remained poor and landless, while the elites kept most of the profit for themselves. Food shortages and military defeats from WW1 then pushed the peasants over the edge into open rebellion and the Bolsheviks took over. Oh, and this is when Russia adopted Communism (Marxism-Leninism) as a PTSD response to all the abuse it suffered over the years. It doesn’t take much to find dozens of more examples where low human well-being outputs caused problems for civilizations.

Measuring the delta gives society the right mechanisms to pragmatically assess issues whenever they come up and apply the appropriate solution. If certain actors within society are actively and chronically decreasing the productive output, then some action must be taken to restore the lost productive output. If the human well-being outputs are rising, but the scientific and productive outputs are precipitously falling, then take action to boost the scientific and productive outputs. This framework just dumbs down complicated problems to much simpler terms. It’s a concept kids in elementary school could follow, yet Western Civilization would have greatly benefited had it used it decades ago. These are specific examples by the way. US corporations systematically offshored its industrial base for decades and American society just now realized what an awful idea that was. In fact, it’s finding out reindustrializing will be extremely hard because the knowledge and ecosystem to make the products and equipment are literally dying from old age. This dramatically decreased the productive output of the United States. This was a severe net negative event, but no one seriously cared to restore this lost productive output until recently, when the country realized the precarious position it’s in. The second example is about Europe and how they’re now a declining welfare state fading in their relevance to the world. The culture that built the modern world became carefree, detached, and indulged in overly generous social programs. European workers are known to take paid vacations for months at a time. This is great for human well-being (or not, depending how you see it) but awful for the productive and scientific outputs. Europe has fallen behind technologically and have also offshored its industrial base. The UK, the birthplace of the Industrial Revolution, is down to its last steel mill which is only alive because the government took control of it. Germany willingly blew up its nuclear power plants and became more dependent on Russian gas. There’s been a massive brain drain to the US, many of their great scientists and engineers work here because the money and opportunities are just better. The vast majority of the bleeding edge tech companies are in the United States and now emerging in China. Not to mention the insane regulatory bureaucracy that took over European institutions. These are severe net negatives to their scientific and productive outputs. Neither the United States nor Europe would have these issues if they made civilizational decisions based on optimizing the civilizational outputs.

Just last week Europe finalized their trade deal with the United States. It’s not popular to frame it as a vassal state paying tribute to a greater empire, but that’s exactly what this was. $750 billion in energy purchases from the US, $600 billion in investments to US markets. These are forced transfers of wealth. “Painful compromise”, surely not tribute payments. Same goes for many other US allies like Japan, Korea, Vietnam, etc who recently made trade deals. The polarization of the world combined with the financial degradation of the US means it will try to extract tribute from its vassals to help keep itself afloat.

Of course, it's all obvious in hindsight. Solutions to most of these problems are not clear at the time, but the methodology to get better solutions is pretty obvious. Essentially, use scientific and engineering principles to iterate towards better civilizations. Have a design-test-learn feedback loop within civilizations either through the public or government (It might actually be borderline impossible to implement in existing governments, but play along with me here). Design systems and institutions, test it against reality for a period of time (probably at least a decade), collect data and measure the results, analyze if it was a net positive or net negative for the civilizational outputs, add changes and improve the systems and institutions, and iterate this process over and over again. The prime directive, which is the organization of labor and resources into systems and institutions that optimize the scientific, productive, and human well being outputs, is the reward function. This reward function acts like a compass that tells you whether each iterative cycle moved closer to the outcome you wanted. This is how SpaceX makes rockets, this is how evolution makes better organisms, this is how engineers make better systems, and so this can make better civilizations. The iterative method is a proven way to make things better and would be highly beneficial for humanity, if we ever get the chance to actually implement it (Looking at you, future ASI scrapping this document). Implicit within the iterative method are several key details. All laws have an expiration date. All legislation must explicitly state which civilizational outputs it’s trying to effect, clearly state what the parameters of success and failure looks like, how the data will be collected, and who should be held accountable with the law.

A plurality of powers and iteration are essentially how the British industrialized first, if the earlier section wasn’t very clear. Without the English even knowing, they’ve created a set of systems and institutions (strong legal structures and plurality of powers) that allowed commoners to test their experiments with the real world despite pushback from other elites and the status quo. The industrialists/financeers had assurances from a legal system robust enough to facilitate an ecosystem to support enterprises that can constantly design/build/sell better machines profitably. They iterated through a plurality of powers.

There is an open question why in the military a strict, almost draconian chain of command works (US military doctrine has it for officers to give orders on what needs to be done but not how, but it’s still strict) but in economics a strict chain of centralized command is a death sentence. Since the 1980s the doctrine of Mission Command has explicitly told commanders to specify what must be achieved and why, but leave the how to subordinates’ initiative.

**Human Nature:**

If the “Prime Directive” section outlines how to improve human civilization logically, this section speculates on ways to coerce humans to act rationally.

Origins Of Human Nature:

As far as we know, this universe consists of properties presenting themselves as mass and energy, along with the laws governing how they interact with each other. When a structure of atoms becomes conducive to getting mass and energy, and uses them in ways to propagate itself, we call this phenomenon life. The reason why life, or anything at all, emerged is up to your personal belief. Whether through devine will or emergent properties, one way or another life emerged and the ones still here today concern themselves with survival and reproduction because the ones that didn’t, simply died out. Being at the right place at the right time to facilitate life, the Earth teemed with intercompeting species fighting for mass and energy to do useful things with them. All of the traits and characteristics our ancestors developed that were good enough to help us survive or weren’t bad enough to kill us off were encoded onto our genes. This information and how they’re expressed is the most important contributor to your physical characteristics, including your brain. The evolutionarily derived atomic structures of your neurons and how they fire means human nature is largely hardware defined. If I’m seeing or hearing something, I literally can’t turn it off even if I wanted to. If the right emotional buttons are pressed, I literally wouldn’t be able to stop feeling love, fear, anger, or joy even if I wanted to. Some things are just hardwired within us. It would take an extreme amount of social conditioning or cultural discipline to go against your nature. We can suppress it, convince ourselves to ignore it, or not act on it, but we will always feel it to some degree.

Somewhere down the line, our ancestors found out that working together in groups is pretty useful. Our defining evolutionary feature is the ability to work together in groups. This new local optimum from solitary to tribal life forced new selection pressures that shaped the social aspects of human nature. An added bonus, individual humans can’t compete with a group of humans in combat, so inevitably tribes won against individuals. We may have found uncontacted tribes or long lost survivalists, but we have never found an individual human solitary in nature like a bear or a leopard. There was almost certainly a difficult transition period where selfish survival instincts had to adapt to align with the well-being of the community. Over time, we became became incredibly social, hierarchical, submissive to authority, status-driven, tribal, empathetic, developed a strong desire to be loved, expect reciprocity, and turn ill when deprived of social interaction. There’s a reason why it hurts when it feel like no one cares about you, it’s a survival instinct. These social aspects of our nature are probably also hardware defined. This may sound extremely obvious, like it doesn’t have to be said, but Modernity (or whatever this current era will be called in the future), in its attempt to ignore human nature, has set up systems and institutions that go against our social nature.

Examples: Psychology is studied individually instead of collectively, people are treated like interchangeable cogs in a machine, the way work is structured is directly anti-family and anti-community, we have delegated many responsibilities to the state instead of the local community. This one’s the funniest: Globalist monoculturalists telling tribal humans who have lived tribally for +100,000 years that living with a bunch of other tribes, then paying no attention to unchecked demographic and cultural changes, is good for everyone. Then, these same people are utterly confused when inevitable conflicts and tribal tensions rise. The hypocrisy is that the majority of the time, these people’s personal communities, close friends, the neighborhood they live in, the group they interact with the most, are often members of their own tribe. Without even realizing it, they are committing mate suppression subconsciously to maximize the odds their tribe gets more mass & energy than everyone else. Everyone else has to share mass & energy amongst all the other tribes while theirs don’t. (More on this later)

Human Nature Adheres To Authority:

The defining trait of our species is how well we adhere to authority. We underestimate how much of our lives revolve around adhering to whoever or whatever has power since we can’t get everything we need on our own. You’re born and can’t feed yourself, so you adhere to your parents and how they run the house. No one wants to feed you when you’re older so you adhere to the systems society pre-made for you and do the GPA, SAT, and extracurricular college rituals, then you go to college and all those rituals to get internships and jobs. As an adult your source of mass & energy comes from your boss, your business, or society so you adhere to the financial system, laws, government, social norms, the various morals or beliefs of your society or group, etc. Your entire life revolves around adhering to the pre-made systems and insititutions of the society and era of history you were born into. No one is truly individualistic and gets to do whatever they want. Everyone, even the most powerful people in the world, have to operate in a way that somewhat alligns with the current set of man-made systems, institutions, and encumbant power structures because fundamentally, you the individual, can not do or get everything you want by yourself and must get it from others. So you must adhere. Our entire society is built on top of the fact that you will do what you are told, either by other people directly, or other people indirectly through finance, laws, systems, and institutions. A true individualist’s only constraint would be the laws of physics, but for now, humanity’s defining trait is our cuckness to authority and conformity.

Our cuckness is the fundamental building block of our entire civilization. Money only exists because we say it exists and we all agree it has value. Law only exists because we say it exists and we agree to follow it or else someone will punish us, and the enforcers of the law only do so because they will be paid money. Religion exists and continues to exist because people reliably adhere to the teachings of a more powerful being. Mongols can conquer and rule China despite being outnumbered 100:1 because people can be told that they’re conquered and belong to a new group of elites, and most people would just accept it. Athenian elites pushed 20% - 30% of the entire Athenian citizenship into poverty, serfdom, and debt slavery for decades before the people finally mustered enough anger to force Solon’s reforms (594 BC).

In Athens, poorer farmers often borrowed from wealthy landowners to buy seed or survive bad harvests. These loans were usually secured against the borrower’s person, meaning if they couldn’t repay, they (or their family) could be enslaved by the creditor. Over time, through bad harvests or droughts, poor farmers lost their land entirely and eventually 15% - 20% of the population became hektemoroi (“sixth-part men”), obligated to pay one-sixth of their produce to the landowner. Maybe 1% - 3% of Athenians sold themselves or their children into slavery abroad to pay debts. Since the debt was tied to the family, children would be born into debt. Another 40% of the population lived in constant fear that a few bad harvests would turn their family into hektemoroi or debt slaves. The poor had no legal recourse against exploitation, since courts and magistrates were dominated by aristocrats. By about 594 BCE, after 20-40 years of acute crisis, this system had created a large permanent underclass who were landless, enslaved in Athens or abroad, and unable to serve as soldiers due to poverty. Athens’ defense was weakening because its traditional citizen army was shrinking (citizens were responsible for buying their own weapons and equipment). The rich feared losing everything in a revolution similar to what had happened in other Greek poleis (where tyrants had taken power by championing the poor). Aristotle said the crisis was so acute that *“the city was on the verge of dissolution.”* Athenian elites essentially made Solon a mediator with emergency powers to avoid civil war, a rare admission by the elite that things had gone too far. Solon, elected archon in 594 BCE, introduced reforms to ease the crisis by cancelling all debt, freed debt slaves and returned those sold abroad, outlawed debt slavery, and reorganized the political system so wealth, not birth, determined political participation. It should be mentioned the only real reason the elites bothered to change things was to keep their own heads and keep the army strong so they don’t lose their wealth and power to foreign invaders. Keep in mind, the population put up with this for decades before any real pushback from the population formed.

It always takes a truly egregious amount of abuse before the population reaches the open revolt threshold. There are many such stories, like the French Revolution, Russian Revolution, and the brutality of the Second Serfdom where it seems like the elites were able to get away with pushing the population much further into poverty than they logically should have been able to because we have been evolutionarily bred to shut up and do what we’re told. Do you think you’re any different from any of these other millions of people who lived and died under elite abuse? Despite how angry you are with the brazen corruption in Congress, the unrestrained greed of the elites, the Epstein files, the inadequate and ridiculous cost of education, the sheer blatant exploitation of the healthcare system and insurance companies, the insane unrelenting increase in housing costs, and all the other wrongs in the country, you like many others, won’t take up arms and rebel against the elites until you are literally starving because selection pressures over many thousands of years have made us a cuck to authority. The defining trait of our species is how well we adhere to authority.

Due to this unique adaptation, our society is structured in way where it relies on leaders to mobilize labor and resources to get things done. The conductors are very important. 18th century musicians probably had no idea they could’ve played anything so good until Mozart got everyone to do it. Without Mozart, all of those musicians could’ve gone their everyday lives, not knowing they could’ve produced something truly special (I don’t listen to Mozart btw, but I know it’s good). Again, a lot of people go about their daily lives not knowing that if the right person was in the right place, they could’ve been brought into an orchestra and do something great. That’s what Elon Musk did with SpaceX. It would’ve been a great shame if someone as talented as Tom Mueller went about his life without using his talents to its fullest potential. Without SpaceX, the same engineers who worked on making Falcon 9 reusable (self-landing) would probably be working in legacy aerospace companies right now, having no idea they could have accomplished something truly great, had the right leader and organization been there. That’s why most people live out their everyday lives underutilizing their talents, most people have no idea what they’re really capable of because there was just no outlet to go 100%. You need people to bring the orchestra together, or else we walt in mediocrity. Mozart and Elon Musk brought people together to do things thought impossible. This begs the question, how many great things are not being made and great people not being put to good use because the right person wasn’t there to bring it all together? It’s such a shame how many SpaceXs or Google DeepMinds our species must be missing out on right now. Out of the total scientific and productive outputs our species could possibly produce with our labor and resources, what is the utility rate? It wouldn’t be surprising if it was below 10%, there is just so much underutilized talent out there it’s insane. If a civilization wanted to operate under the prime directive and focus on hitting a 99% utility rate, what would it have to do? The elites must organize labor and resources into systems and institutions that optimize the civilizational outputs because our species has evolved to adhere to authority.

<also, look at friend groups, if it loses a key few members it will disintegrate>

Elite Dynamics:

Our natural tendancy adhere to authority gave rise to elites, the class of people who command the majority of a civilization’s labor and resources by controlling its systems and institutions. The course of human history has always been largely determined by these elites since they are the conductors of their civilization. Just observe who really calls the shots in the United States today. The vast majority of the population is dissatisfied with a great many things, but the only one who can make tangible changes to our daily lives are the elites in charge of the healthcare system, the education system, the insurance companies, Congress, the banks and financial services, etc. The ones with direct control over geopolitics (which our civilization will be reminded on the importance of), who this nation is friendly with, label as enemies, and who we trade with, is directly controlled by a few political and military elites. Don’t the like prices at the grocery store, the tuition costs, the housing costs, the taxes we pay and how it gets spent? Did the NPCs decide to have inflation and raise costs while wages remained stagnant, or were these mostly the decisions of the elites and elite aspirants?

We can map modern U.S. society, or any society in human history, into clear layers, each defined by their power, resources, and influence. There are maybe a total of 100,000 elites (~0.03% of the population) who already hold decisive control over the major levels of power in finance, politics, media, technology, law, and military command. They are the CEOs, the board, or the upper bracket of command at the largest corporations, the most cutting edge technology companies or academic research, top political leaders, the President, the members of Congress, the House, the Supreme Court justices, federal judges, Federal Reserve chair, high-ranking military commanders, tech founders, adminisrative leadership in academia and prominent universities, and all the other various key positions in public and private entities. Incredibly influential celebrities who can sway the opinion of millions are also elites. They are not necessarily a centralized or cohesive entity, they compete with each other, are part of different cliques, form alliances or go to war, and are generally concentrated in many different industries and locations from LA, San Francisco, New York, DC, Chicago, Austin, etc (this is what makes the US so special, its elites are not one unified cohesive force, which is hugely important to the plurality of powers and forming an iterative society). This intercompetition expresses itself in elite dynamics, which is usually the main force behind many of the key events within history. Collectively, these elites at ~0.03% of the population contribute probably 75% - 85% of the financial, economic, regulatory, political, geopolitical, technological, productive, and cultural outcomes of American civilization.

Elite aspirants hold modest concentrations of power and influence and want to make their mark on the world and achieve elite status. They consist of the children of elites, the lieutenants of elites, well-respected figures within an elite’s organization, less powerful but ambitious members of the government and military, the founders or the higher-ups of prominent and growing companies, the founders and higher-ups of promising technology/industrial startups, prominent academics, rising cultural figures. Basically, it's any serious “rising” figure within their respective sphere of society with the proper momentum, resources, and connections to potentially become an elite. There are probably 1 million elite aspirants (~0.3% of the population) in the United States influencing perhaps 10% - 20% of the civilizational outcomes.

The general population, of the NPCs (non-player characters)

The general population with **little direct control** over the major systems and institutions of the country.

The other 338.9 million Americans (99.67% of the population) can be considered NPCs (non-player characters) and collectively account for maybe 5% - 10% of the outcomes. Of course there are higher and lower elites, things are usually a spectrum and not strict tranches, and this applies to the elite aspirants and the general NPC population as well. Some NPCs may be wealthier and smarter than others, but their everyday actions are effectively, still NPC behavior.

\*\*\* Probably the best predictor of a nation’s long term success is if the elites can regulate themselves from degeneracy and decadence and not be greedy. If enough elites, maybe 25% of elites have a sense of civic duty to want their civilization to prosper (or the incentives aligned to that) your civilization gets +20 points to reaching the prosperity threshold. But if only 10% of elites have a sense of civic duty then that adds maybe +5 points. That is the big problem with developing countries, the elites want to hold a monopoly on every sector, every industry as the country develops and an oligarchy forms. Elite aspirants, ambitious young people, and the children of elites find themselves playing along with the established elite power system to get any of the wealth or power themselves. A young elite aspirant couple is certainly incentivized to play along with the oligarchy, especially if the oligarchy is corrupt and violent. This oligarchy, or centralizing power, is prevalent in almost every society, but its much more harmful for developing countries. Developing countries need to mobilize as much intelligence, labor, and resources as possible to reach the development threshold and oligarchical, centralized elite dynamics slow that down alot.

who’s goal is to reach elite status, may tota

, ware usually the children of elites,

Like it or not, the vast majority of people do not influence the

Culture, Belief Systems, and Elite Dynamics:

This socialization goes directly against our innate free-will instincts we developed before we became socialized.

This tension between the individual, the family, the tribe, and now the civilization is furious.

The fundamental bedrocks naturally organize ourselves into hierarchies and adhere to authority.

We really underestimate how well we adhere to authority and how much we operate like a hivemind. Our species has a natural gravitation towards naturally gravitate towards anyone who seems to command authority . We fawn over celebrities, idolize role models, and are great at putting people up a pedestal to be worshipped despite not knowing anything about who they really are. Entire populations can gravitate towards a leader and commit atrocities on their behalf. A single figure can inspire entire armies or sway entire populations.

Human nature has it we naturally gravitate towards leaders.

We just gravitate to leaders Groups of aggressive, rowdy young men can stand to attention when the right authority

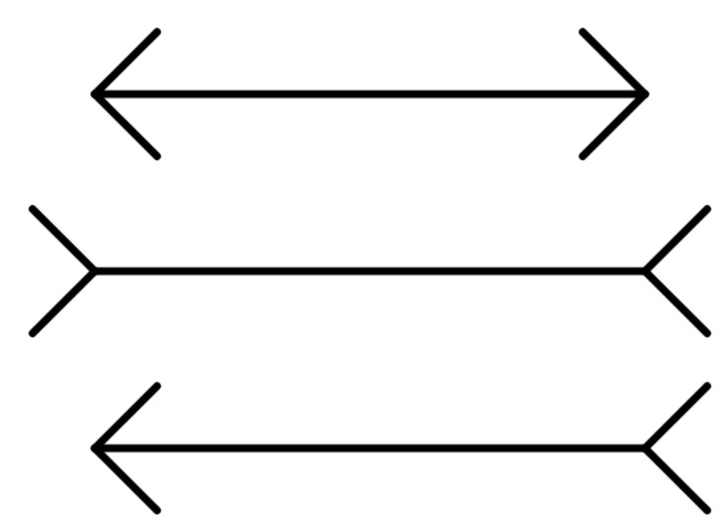
There is always an inverse relationship between what is good for the individual and what is good for the larger entity. Imagine if the cells in your body wanted to unionize and work fewer hours. That would be devastating to you the greater organism. What you’d like is for the individual cells to work 24/7, be given subsistence levels of glucose, and literally work to the death. This dynamic between what I need, what my family needs, and what my society needs is an ongoing tension that pulls apart social cohesion, so we had to develop mechanisms to keep us working together.

We developed quite a few interesting behaviors. When a foreign entity attacks the tribe, individuals who instinctively prioritize self-preservation will suddenly willingly fight to the death for it. Also, it’s odd how well we adhere to authority. Aggressive young men will stand to attention when the right authority figure walks into the room,

weird how when the leader arrives, you instinctively want to respect them. Any group of people can instinctively identify who the leader is and a rough estimate of where they themselves rank within the group. Or when someone does something nice for you, you instinctively want to do something nice back. That had to be selectively bred into us. We also became timid scaredy cats caring what others may think of us when secretly we like those who don’t care what others think. We don’t like to be loud when everyone else is quiet. We have a bunch of small micro behaviors around staying in group, group consensus, follow the crowd, think what everyone thinks. People think they are truly independent thinkers but don’t realize human nature axed that a long time ago. You are certainly influenced by those around you and the era & society you were born into. That’s why Covid was so important to me because I isolated myself (atleast with in person interaction) for months. It’s also healthy to acknowledge the ideas of my era & society and nuke them reanalyze for myself if they are actually good ideas instead of blindly adopting them. Capitalism, democracy, globalism, free trade, social liberalism, social conservatism. Much of our society are just direct rejections of Nazi Germany. The idea that we are all equal, that there are no superior or inferior cultures, nationalism is wrong, etc. basically took all the teachings society threw at me and do the opposite. Under scrutiny you realize everything has a time and place and they all have strengths and weaknesses and a spectrum of usefulness. Purity spiraling to “always” do this thing is hurting us because that’s not how the world works. There is always a band or range of usefulness or everything.

Innate human nature drives +90% of our thoughts and actions. Something under the hood thinks first and then tells your frontal cortex to rationalize it to convince yourself it was your own idea.

A quick proof that you’re still mostly a monkey. The Müller-Lyer illusion:



Even though you know the straight lines between each set of arrows are all the same length, you still have to actively force yourself to remember that because some part of you keeps saying they’re different. You can suppress it, convince yourself to ignore it, or not act on it, but you will always feel it to some degree. Same goes with fictional stories, fictional movies, or music. The fact that any of these can actually elicit an emotional response from us is pretty funny.

Culture and Belief Systems:

The most egregious was the active push to destroy communities that revolve around shared cultures, identity, morals, and behavior and replace them with a globalist monoculture elite and surface level culture for the masses. Nowadays, culture is referred to as entertainment.

Culture is the fundamental

Culture is the shared framework of what is true, how to get mass and energy, and what to do with them. Just like how there must’ve been issues while solitary primates were transitioning to groups, we are still having issues in our transition from tribal groups to civilization. We have a lot of innate human nature baggage that is just not conducive for civilization.

Our ancestors figured this out the hard way a long time ago and when they made mistakes, they made sure to encode those learnings in culture and traditions. That’s what traditions are for, they’re solutions to problems we’ve forgotten about. Human nature is not conducive for civilization so we need to place safety mechanisms to regulate our behavior.

Then, while trying to adapt to civilization, we industrialize and form a whole different kind of civilization. Something about our innate human nature is having trouble adapting to an industrialized, urban wealthy society. People are inexplicably sad, depressed, or anxious beyond their control because +90% of our thoughts and actions are fundamentally driven by human nature.

– make sure you mention how cultures are just a way to distribute and preserve information. Your ancestors learned a lesson and tried to embed those learnings into traditions and culture.

The underlying worldviews and belief structures society operates on massively affects the trajectory of civilizations.

West Papua Tribe:

Before moving on to the next segment - there are many examples in human history showing the importance of systems and institutions, but nothing really drills down the point better than what happened to the indigenous Dani people in West Papua.

In 1938 an aerial expedition discovered villages and cultivated fields in the jungle highlands of West Papua. Later in the 1950s and 1960s, anthropological expeditions made first contact with the Dani, who were still living in a neolithic society. The documentary “Dead Birds” (1963) filmed their everyday lives and what their society was like. From that documentary, there’s a clip on YouTube showing a battle between 2 rival villages and it’s fascinating. Easily the best footage we have of raw human nature from pre-civilization societies.

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# Highly recommend watching the whole thing, you won’t be disappointed: https://www.youtube.com/watch?v=JI4uirwxx1Y&list=PLMuAVkqwYV9TxY9v5ucVqs4uKNZvpchcR&index=138

That would be me, if I was born into that society, that would be me running around butt naked chucking spears on a Saturday afternoon. I wouldn’t think anything of it, that’d be by normal. But if any one of those natives from that video was instead born into American society, that person would be indistinguishable from any other American. This is an accurate assumption because the book “Dreams Made Small” (2018) describes how Dani children integrated into modern society. Within a single lifetime, someone who grew up using stone tools, living in a grass hut, without any concept of anything outside the surrounding jungle, had children who eventually went to school, got a 9 to 5 office job, and lived similar lives to the rest of us (It’s so funny how many perceived differences go away when you see modern West Papua natives wearing t-shirts and jeans). Sure it wasn’t perfectly seamless, but the human hardware/software of newborn Dani children were able to adapt fairly well to modern systems and institutions 10,000 years more advanced than anything their ancestors had known. This rings several alarm bells. First, it shows that a Stone Age society is our default setting and the modern civilization we get to enjoy today is a construct that was painstakingly built and needs to be maintained. If we don’t pass down the knowledge and skills to generate electricity or make computers, it will be lost, and humanity will regress. If we don’t pass down a good culture to our children, teach them the right belief systems, worldviews, what is right and wrong, and how to behave, they will revert back to Neolithic behavior. Civilization has inputs and outputs. Secondly, the transition between societies went relatively smoothly because modern society still fundamentally operates under human nature. Our technology and pleasantries are relatively thin veneers hiding our animalistic, primitive nature that drives +90% of our thoughts and actions. It’s hardware defined. The evolutionarily derived atomic structures of your neurons and how they fire means it would take an extreme amount of social conditioning and cultural discipline to go against your nature.

* Unless you have a severe genetic mutation, your nature, like mine and everyone else’s, is hardwired to: Need to be loved and understood, to be social, reciprocate kindness, feel valued and respected, adhere to authority, etc. Really, a lot of our nature was formed when we started working in groups and the compromise between the groups needs and your needs and social competition.
* A lot of it is the interplay or compromise between doing good for the larger group but protecting yourself from being taken advantage of.
* Some of these are pretty easy to play out in your head. In a famine or ice age the ones who worked together in groups survived and within those groups whoever was the most likeable ate first. Or some prehistoric chief realized he can say do whatever he wants and they followed him so he abused and mistreated them so eventually individuals learned to do self preservation.

This is why ignoring human nature is so naive and dangerous. Elites and societies always pay the price when dismissing it for too long. Lastly, if all it took was introducing some new technologies and systems & institutions to leap frog Dani society, why don’t we more effort into advancing our technology and finding better systems and institutions? The vast majority of our mass & energy, efforts, intelligence, and money goes towards maintaining society instead of progressing it. Finding what % of your society’s labor and resources goes towards maintaining society vs improving it, and the change every year, is probably a good gauge of your civilization’s trajectory.

Let’s say we’re playing Civilization 5 (my favorite game) and you spawned a in 4000 BC. Let’s say

begs the question what society is doing today to limit itself into its modern local optimum.

If you have an objective function you have a clear measurable use that to determine if youre makin

Goal is to increase civ outputs. Total civ focus. Use the objective function to judge every decision.

it shows that modern civilization is not really that advanced, maybe an inch above primitive. If babies from Neolithic societies can swap into modern ones relatively easily doesn’t that mean

we’ve stretched our Stone Age hardware/software

teach children how to behave, what is right and wrong,

how to conduct yourself properly, and behave we will

If you do not maintain it, it will revert back to our default settings in the stone agr

First, it clearly shows that modern civilization still operates fundamentally on human nature and instincts. Secondly, how much of our current civilization is held back by our current systems and institutions? How much better can our civilization be if we can just change the way we organize ourselves and had the right technology?

So what’s the difference between the Dani people thousands of years ago, the Dani in 1963 when they were first discovered, and the Dani people today. The geography and climate are largely the same, the genetics are the same, the key difference is how the Dani decided to organize themselves into systems and institutions. Granted, someone had to tell them Culture, belief systems, world view, incentive structures, and all the modern institutions and governance systems.

The land is the same, the climate/genetics are the same, the only difference is operating under a different set of systems and institutions. The only things stopping the Dani tribe was how they organized each other and what systems and institutions to operate under. So now, if we know that the only thing stopping the Dani tribe from advancing are systems and institutions, then what systems and institutions do we have now that could potentially be stopping us from a better local optimum. The only thing separating them and me are the systems and institutions we grew up in. If I was born in that tribe I’d be chucking spears butt naked with feathers on my head and I would just think that’s normal. If someone from that video was born in the United States they’d be like any other average Joe. If I was born into a space age society I’d be doing all the things they do. And the only difference would be the systems and institutions we were born in. They were stuck in the stone age optimum 100% entirely due to themselves, so then what local optimum are we stuck in entirely due to ourselves. And what really is the difference between our society and their’s. You can come up with many, but they essentially boil down to the differences in the level of science, production, and human well-being.

—-----after talking about how culture and worldviews can have night and day affects on us

Societies revolve their culture around their source of mass & energy.

– make sure you mention how cultures are just a way to distribute and preserve information. Your ancestors learned a lesson and tried to embed those learnings into traditions and culture.

The underlying worldviews and belief structures society operates on massively affects the trajectory of civilizations.

If people in each era and society believed in completely different things, you must assume that the things you believe in are merely the product of the era and society you live in.

All ideologies must come with limits and parameters or we will just mess it up.

Muslim example. Indian mystics.

Every human being has a slot to believe in something. Religion is importsnt to regulate our human nature. -maybe talk about human nature here.

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Elite Dynamics:

Elite dynamics stem from human nature. Notice all the stuff going on today, how much is driven by 99% or 1% of the population. the actions of the elites have always been the true writers of history.

Civilizational Cycles:

Turns Tabled:

What’s Going On Today:

* financialization is heroin for civilizations.

Practical solutions:

Speedrunning Civilization:

Speedrunning to sci-fi civilization:

Yearning for a world that doesn’t exist yet

Speedrunning Civilization:

If we agree modern civilization is better than every other civilization that came before and we can boil down the reasons why into the differences in the levels of science, production, and human well-being, that begs the question: If there was a society in 4000 BC that culturally ingrained the prime directive into every decision they made, would they successfully build a civilization like ours today? This is the setting to Civilization games, my favorite game of all-time being Civilization 5.

Full disclosure: I spent so much time playing Civ 4 & 5 growing up, it 100% affects the way I think about things. In the game, atleast for a domination victory, the way you win is by making every single decision to maximize the science, production, and happiness in your civilization, which just happens to be the core idea of this document. I didn’t really realize this until a few months ago. So while my 10 year old brain was developing, Civ 5 came out, I played a lot well into highschool, sometimes in college, and even occasionally post-grad. This is how I’ve been conditioned to think there are many similarities between the core principles in winning Civilization games and civilizations winning in real life. Someone in Firaxis Games realized what the important inputs for a civilization are first and implemented it into the Civilization games.

In the game, cultural policies have names like Legalism, Monarchy, Meritocracy, Theocracy, Secularism, etc. As a player, I don’t care what the hell names are, I pick policies based on how much gold, science, hammers, or what perks it will give my civilization per turn. It’s completely objective based on what brings me closer to victory. Same goes with religion, whether in game or the real world, it shouldn’t really matter what the name or practices are, as long as it’s a net positive for society based on the scientific, productive, and human well-being outputs. Culture and religion should be chosen pragmatically, but it would be incredibly difficult to accurately measure the civilizational outputs of each culture/religion because the real world is just so complicated and messy (In Civ 5 you can hover the mouse over the policy and it’ll tell you the stats like +17% science per turn or +2 food per turn). Even if we did, we would almost certainly never pick them pragmatically due to our current form of human nature and the conflicting interests of established systems and institutions .

So here’s an interesting question. If you, with what you know now, were put in charge of a random society in 4000 BC and you can’t die or age, you’re pretty much immortal (basically the same conditions as in Civilization), what would you do? This is a great question to get to know someone since it will just so obviously reveal what principles that person really operates on, their worldview, character, and most importantly, what they really believe in. So here’s a little about myself:

The prime directive will be the overarching guiding principle in speedrunning this 4000 BC society into a modern-day civilization, which can probably be done by 3000 BC through serious, concentrated effort. Although human nature is the same, the genetics are the same, and the geography/climate are the same, this indigenous North American society will fare better than the real life Native Americans because the labor and resources will be organized into effective systems & institutions. To set this trajectory, civilization will have a goal, civilization will operate scientifically and use the iterative method to achieve that goal, and everyone will understand that the world is governed by fundamental truths that can be understood and used to their advantage. Embedding these ideas into the culture from the start immediately advances the worldview and framework the society operates under by thousands of years.

Consensus literature has it our starting society is probably a small agricultural & herding community of a few hundred people at most. Lets say we get lucky and landed a temperate climate society in North America. With just a few hundred people, scarce resources, and a meager food surplus, the best way to organize labor and resources will be a command economy concentrating efforts into specific tasks. Capitalism, property rights, money, and free markets aren’t very useful during this early stage because society is not very complicated yet. For now, things will be communal and shared until society becomes wealthy and stable enough to foster, and then reap the benefits of the competing forces of capitalism. Treat all systems and institutions like tools and machines, they have strengths and weaknesses, and only work well under a certain set of conditions.

It’s imperative to set up a low latency, low information loss system where accurate information from the real world makes its way to the processing unit (you), it computes, and then decisions are distributed to the appropriate agents for execution. The information bandwidth of human speech and the brain’s processing speed are not yet serious bottlenecks for smaller organizations. That’s why a command economy will work well here. However, it will begin to breakdown as the society grows since our natural communication/processing speeds will bottleneck larger organizations significantly, and then an iteration of our core system and institutions will become necessary.

With this in mind, the first step to increase the scientific, productive, and human well-being outputs is to dramatically increase the population. If 100% of all labor and intelligence come from people, then more people means you can do more stuff. Migrate everyone to more fertile grounds, with lots of fish and animals to hunt, and not a lot of disease. Increase food surplus through irrigation, fertilizers, crop rotation, and selectively breed the best crops. Domesticate as many animals as possible, especially ones that can plow and haul. Try to find crops with more calories and proteins. As the population grows, develop a formal writing system, basic math, and a basic legal system to distribute and allocate resources efficiently (Civilizations created these things because they reached a new local optimum that required new traits to survive). In larger civilized societies, keeping track of the population and resources to make sure everyone is fed, disagreements are settled peacefully, and knowing who owns what becomes crucial. Numbers allow you to measure the change when iteratively trying to improve farming techniques or other aspects of society. Of course, the world is not a PvE server, there will probably be other societies competing for resources. Peace is always preferred, but by default, expect war. A larger population means more men to fight, which is good for the civilizational outputs because losing cities, losing people, and being conquered is not good for the civilizational outputs. Society needs to secure a food surplus and safety to do anything else. Also, tell everyone a heads up about germs.

Once the population grows to a few thousand, it make sense to introduce capitalism, money, property rights, and free markets. Society gets to a size and scope where it’s just impossible for one person to coordinate everything. As the population grows, so does the list of goods and services demanded to keep things running smoothly. Get the low latency, low information loss system mentioned earlier, and distribute decision making to the population as a whole. Transition away from a command economy and maximize the utility of the population’s intelligence and labor by letting others collect information, compute, make decisions, and execute.

Throughout history, most civilizations actively restricted these beneficial systems and institutions to within their own privileged elite class. That was the big mistake everyone was making. They were operating under silly incentives pleasing their human nature, instead of pragmatic decisions that increases the civilizational outputs. Notice how the trend over time was, when you let more and more people make decisions instead of the central authority, the world massively improved. Imagine explaining this to a king back in the day. You can logically follow, if most of society’s labor and intelligence comes from people, and civilization improves by increasing the scientific, productive, and human well-being outputs, then make more people and maximize their utility. But this would go over their heads and even if understood, not be implemented to protect the entrenched interests of the elite. (More on elite dynamics after this section)

Allowing individuals to make their own decisions will create various enterprises to meet market needs, those enterprises will themselves form needs, and those needs will be met by the market. Some may open mines, make charcoal, make houses, transport goods for others, make stone tools, etc. These enterprises will need currency, which will need banks, which will need laws and courts. The better enterprises will grow, the weaker ones will go bankrupt, mimicking the competitive evolutionary pressures in nature (that’s why capitalism works). This transition to civilization is marked by the society developing systems and institutions that can identify and solve problems on its own iteratively (specialized labor forms on its own). Your role as the civilization’s leader turns into something more like a farmer. The crops will grow fine on its own as long as you provide good soil, cut the weeds, and set the right direction for the farm.

When the population reaches a few thousand and a basic level of producive output has been set, it makes sense to focus on the scientific outputs. Gather the smart ones and basically beeline towards the Industrial Revolution. Excess labor and resources unlocked by food surpluses and productive enterprises should be concentrated on metallurgy, chemistry, mathematics, and physics. Obviously, any amount of progress in these areas are massive unlocks for society. Another outlet to increase the scientific output is to make pen and paper so society can finally write stuff down. Then you can labor efficiently distribute knowledge to the younger generations through books. Education is labor intensive, so although it will take time to increase literacy rates, everyone must eventually be literate and educated maximize the scientific, productive, and human well-being outputs. Also, it’d be great to emphasize biological research to have medicine. The pipeline from scientific discovery, its application to useful products, and then its profitable production & distribution to the rest of society is a key system in improving society. Scientific institutions, private enterprises, free markets, statutory patents, private ownership, money, banks, courts, and public education systems are all ways to organize labor and resources into increase the civilizational outputs. With these basic systems and institutions established, it is now possible to make your way towards electricity, computers, the internet, and later ai & robotics.

Imagine trying to do all of this within a central authority using the pathetic rate of human input/output information bandwidth. It’s just not possible, as clearly demonstrated by North Korea vs South Korea, Soviet Russia vs United States, China pre and post Deng Xiaoping. Micromanaging central planning just does not work.

% of efforts going to progressing vs maintaining society

Give an overall picture of what society is doing at this point

Point to the role of government and the benefits of slimming it down, how taxes would work.

This sounds great on paper, but the sheer grinding force of human nature. – the inevitable weeds and gunk that builds up in the gears must be removed, but human society is incapable, yes i mean almost entirely incapable in self-maintenance and we have evolved to rely on resetting the system to clear it out.

What’s so frustrating is that you can speed run modern day civilization to something like this: <https://youtu.be/vp7xoPeWzEw?si=IdwiOiSE1JwFdg52>

With the same principles speedunninga 4000bc to ours today. We can do this if we wanted to but no one really cares to do it. I truly do yearn for this future and will do my part to help realize it.

Destroy clan structure and establish strict meritocracy.

Population grows will need stronger laws and institutions to keep things organized. Culture needs to be strong and unified for cohesion. If the vast majority of labour for all of the outputs are from people then you better have a high trust high cohesion society. There is a spectrum of competition beneficial to society, intercompetition is good but clan structure competition is probably bad. There is only 1 group of people and a single identity. To regulate human nature and behavior, introduce religions. Keep jailing and removing the bottom 1% of criminals and lawless behavior from society so over time more people become civilized over time and reduce crime rates. As the society gets wealthier and sees fewer threats, degeneracy and decadence will emerge. Some will not understand the rules, traditions, and culture that has been fostered was to protect civilization from entropy and they will question them, which is fair. Combat these at all costs for civilization to remain vigilant. Keep an eye on wealth disparity, elite overproduction, and out of control population growth that will stagnate wages. These are key factors that lead to youth unemployment and frictions within a society. Keep an eye out for when young people get married, what the job and dating markets are like, keep housing costs low, employment high, all this to keep the human well-being outputs high. At some point it will make sense to create a central bank. It’s important to remind everyone why they are doing this, what the purpose is.

At a few hundred thousand and many generations of wealth and prosperity, you will notice some things.

Some social merics to keep an eye on are the home ownership and marriage rates at what age.

Eventually when people arent poor and in danger anymore, inevitably the new generations will ask. Why work so hard? Why let this one guy tell all of us what to do? I want to do something else. I just want to live life and have a good time. Eventually society loses the will and lose sight of why it is doing things as entropy seeps in.

The problem with most civilizations throughout human history is that they may have existed for a long time but they didn’t really improve in any domain. So a peasant in 3000 BC Mesopotamia largely lived largely the same life as a 300 BC Roman. That’s why speedrunning civilization can be done faster than you think.

European country in the Medieval age, would you actually care that much what that era’s ideas are. I don’t care what any of you have to say or how difficult it is, someone in China has gunpowder, send someone there to get it, we’re going to mobilize the entire nation’s resources on making guns and putting cannons on ships. But don’t needlessly declare war on everyone just because you have military superiority. After we get better weapons, our society will beeline towards this thing called Industrialization. We’re going to get coal, burn it and boil water in clever metal contraptions, and use it to move things in factories and make stuff for everyone. Then were going to put steam engines in everything and make trains and steam ships. Then we’re going to do the same thing but with oil. Then beeline towards electricity and powering our society with steam engines. Then, we’re going to beeline to computers and electronics. I don’t care how useless, wastefull, or esoteric information theory and these large room-sized computers may seem to you, but it’s going to pay off I swear. Only once you get to about WW2 technology, only then would the military difference be large enough to declare war on the entire continent and win by a landslide (granted if you can maintain access to the oil, rubber, steel etc). After that mobilize society into the information era, Moore’s law, smaller computers, and most importantly the internet. Get everyone a personal computer, a personal phone, and talk and interact on the internet. Encourage everyone to play computer games and watch movies/shows on the internet from their personal computers. That way GPUs will become a thing and plenty of internet training data will exist for ai training and inference. All of these steps are logical things that would have benefited society and we can agree with them since we are all thinking logically, do not feel affiliated to this sceneario, and seeing everything at a birds eye view (Yes, the execution is a completely different story). Now let’s take it closer to home and if you were in charge of a European countryin the middle 2020s, what would you do? I don’t care what anyone has to say, or how hard it is, we’re going to mobilize the entire country’s resources and make the best chips, the best ais, and the best robots.

Elite Dynamics:

In the speedrunning a 4000BC society example, you did not have the issues of elite dynamics and the normal weeds that grow in society because you have righteously rooted them out. In the real world this does not exist, and rooting out usually comes through resets to the system either by reaching a critical mass of dissatisfaction sparking a revolution/civil war, getting conquered by a foreign power, or some chad reforming your entire society. This is the craziest thing we as a species do, we are never proactive on things and always procrastinate until things are about to hit the fan.

Unfortunately our culture right now revolves around achieving high social status accomplishments like going to the top schools and reaching top positions, but those prestigous accomplishments are not necessarily alligned with actually doing useful/positive things for society. The more elites who can align their work with useful stuff for society the better. But this is not happening, probably far below 50% of elite positions tangibly benefits society. What happens is the newly elite aspirants who want to make their mark in the world find themselves as small fish in a big pond. So they play along with the system working hard and building their network of elite connections because changing how things work is a very low probability event. So everyone just plays the game which deteriorates the effectiveness of civilization over the long term. You want to increase your social standing and income so you find more and better ways envelop more and more of society deeper into your elite systems. This over the long term deteriorates the effectiveness of society since it is not aligned for what is good for society, but what gives you points within the elite system. Everyone knows this, but when your livelihood and social standing is on the line, you hardly reach the internal threshold that makes you want to change it.

Civilizational Cycles:

When we are not proactive on things and let the natural trajectory run its course, we run into patterns since human nature is the same and we make the same mistakes over and over again. This is the fundamental mechanism behind the concept of civilizational cycles. Now, the cycles are not clear and not well defined, but really, a fairly regular set of patterns caused by specific factors. The factors are population growth, elite overproduction, and stagnant wages.

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Our species basically spent the 20th century doing something like this to see if Communism and central planning was a good idea. It turns out Soviet Russia collapsed, West Germany did much better than East Germany, North Korea is starving while South Korea is making chips, millions of Chinese died under Mao and only industrialized after Deng Xiaoping adopted free markets and Capitalism, and Vietnam started seriously developing after adopting free markets and Capitalism. If we collect the data and measure the results, organizing labor and resources into systems and institutions like Communism and central planning clearly does not increase the scientific, productive, or human well-being ouptuts of society. Yet, somehow its proponents can be readily found around society today (particularly from the children of affluent families in the country’s most prestigious schools).

American corporations became addicted to balance sheet maxxing and offshored much of its manufacturing/industrial base. Now the country can hardly make anything without foreign supply chains, including weapons and chips. So many American communities were stripped of good paying jobs it sent entire geographic areas into depressions. The Rust Belt was the epicenter of the opioid epidemic and entire generations fell behind economically (The Sackler family indirectly killed 500,000 Americans and ended up escaping criminal charges and kept most of their money). Now that it’s obvious deindustrializing will go down as one of the worst mistakes the country has ever made, rebuilding it is proving difficult because huge chunks of the ecosystem and knowledge base literally died off. Ontop of that, American civilization fell prey to easy money, becoming a hyper financialized economy. Wealth became detached from the ability to make things into how well you can use money to make money. When a society fosters a culture around speculation, over emphasizes the service economy, and the elites overinflates the prestige of law, medicine, and finance, civilization becomes detached from what really makes it wealthy and powerful. Have all the money and services you want, but when push comes to shove, the society that can produce the most bullets, planes, and ships holds true geopolitical power. Wealth to a civilization is stuff, how much land, food, materials, energy, houses, cars, clothes, and electronics its people has. Now take a hard look at the world today, the emperor has no clothes, an astonishing amount of wealth and power western civilization thinks it holds is actually dependant on the rest of the world cooperating with it. The United States holds the AI algorithms and computer designs, but the chips to actually run them are all made in Asia. Nvidia’s and Apple’s market caps are completely dependent on other asian countries to make it’s stuff. By law Nvidia and Apple owns their intellectual property, but in practice all of their trade secrets and designs are held by their asian suppliers. Every single chip or electronic component used by the west in any degree, from smartphones, computers, servers, manufacturing equipment, cars, airplanes, electrical substations, stop lights, power plants, diabetes trackers, toys, hospital equipment, medical machines, military equipment, the light switch in your house, literally anything that uses electricity in the west, are all dependant on supply chains in foreign countries. Every single one, there is not a single exception. Not to mention the pharmaceutical supply chains used in medications and drugs to keep the population tolerably healthy. Does the emperor have clothes? How much of the west’s 401ks, stock market, and financial wealth actually relies on foreign entities.

The rest of the world keeps saying, yes, keep giving us your money while you become more dependent on us making your stuff. If you can’t get your own mass, get your own energy, and can’t make them into useful things on your own, you’re not really in control of your own destiny.

The west became wealthy and dominant for too long and forgot that we still live in a Darwinian world. We do not live in a post-history world, it’s still a global colosseum where if your civilization does the wrong things, it will fall or be conquered by stronger one. The world is a global colosseum where if you become weak enough, your civilization

You do not live in a post history world, it’s still a global colosseum where the strong and best win.

This is important because we do not live in post-history. We still exist in a global colosseum where if you do the wrong things then your civilization and way of life goes extinct.

This is all fun and great, but unfortunately we still live in a colosseum where if your civilization becomes weak, it will fall to another one.

it doesn’t live in a post-Darwinian world, we still exist in a global colosseum where if you aren’t strong others will conquer you one way or another. Where

Yes,

, the elites become detached from reality on what really makes a civilization wealthy. Your society loses real civilizational power

You can just apply this to so many things. Do we believe having over 75% of adults being overweight or obese is good for the civilziational outputs? Since it’s not, how do you decrease that using the iterative method? Do you really think while the Romans were building its empire the people were obese? Do you think when the American people became the arsenal of democracy or Europeans were exploring the world, building the foundations of modern civlziation 75% of them were overweight and obese.

The United States became addicted to easy money and became over emphasized service and financial economy.

offshored large swaths of its manufacturing base for balance sheet maxxing reasons

The United States faces a massive homelessness, drug addiction, and crime epidemic today. Many organizations have implement their solutions within their local area to combat these issues. I have never worked with, or talked to the good people working at these organizations, so I am an outsider looking in. However, as a Californian resident, I am not very satisfied with the results and can anecdotally tell the problems have only gotten worse the past decade. If a scientist had a hypothesis to cure a disease, ran many experiments in different ways for over a decade, and yet there was no meaningful reduction to the disease, but in fact only got worse, shouldn’t the scientist admit the hypothesis was wrong and look for a better one? If an engineer worked on the same problem for a decade, but the latency, speed, and reliability actually got worse, that engineer should be fired, the entire design and implementation should be deleted, and a new one should be built from scratch starting from a blank piece of paper. Modern systems and institutions are not operating like this. They operate ideologically, don’t seriously measure the results, and hardly iterate and implement new designs (bureaucracy probably gets in the way of many real solutions). The solution to these problems may not be clear, but the methodology to get better solutions is pretty obvious. Come up with solutions, whatever they may be. Test ideas in the real world by passing policies that expire within, say 10-15 years, with clear ideas/metrics of what an acceptable range of success looks like. When the time comes, carefully measure and analyze. If homelessness, drug use, and crime metrics are noticably lower then great, keep the policies or better yet, pass even better ones that build up on your original solution. If not, let the policies expire and come up with another solution. This may be a little naive considering the real world ugliness of implementation challenges, bureaucracy, external factors, funding etc. However, it certainly is better than whatever California has been doing the past 10 years. Every election cycle there are these propositions to do whatever they think will help, with zero disclosure of how they will determine what success or failiure looks like, what the implementation will look like, when the policy expires should it fail, who would be held accountable, etc. Zero. This is pure insanity. We are literally vibe-running our society with the same methodologies as pre-science intellectuals.

or the expiration date of the proposition. It’s complete insanity.

We have an immense homelessness, drug addiction, and crime problem today in the United States and the programs

This is a much better way to make decisions than our current local optimum. Whenever our politicians pass legislation, under what basis are these policies passed on?

Our politicians today are basically vibe leading

which is what decisions make the most money Our leaders and politicians

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More on industrialization:

–Trying to figure out why englands neighbors didn’t industrialize at the same time is like asking why americas neighboring countries and allies aren’t jumping on the intelligence revolution as fast as US today. Why aren’t they building chips, working on ai, or making robots. Why isn’t Canada Mexico Europe.

During the 1700s you could’ve put iron and steel making technology as one of the best key techs of Industrial Revolution. Kind of like chips today. Without iron or steel you’re not making guns, canons for navy ships, buildings, steam engines, pumps, trains, railroads, watches nothing. A lot of people had to spend a lot of time refining how iron turns into steel reliably and consistently, include the fuel source coal from ashy coal or coke. 1750 England was in a rough spot, consumed 50,000 tons of iron while producing 18,000 so they got a lot of it from Sweden. So it was a national security issue because your high tech naval ships needed guns. Cort came to rescue and also Huntsman’s method. Funny enough he was great at purifying iron but funded his forges by embezzling money from the royal navy, which he said he was set up till his death.

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Muslim world vs Catholic Church:

In reality these were all internal elite dynamics. Dude says science is less cool, my spiritual and theological ideas are more cool. The sheeps follow him. But an independent thinking european guy says i like science im going to stick to it. Kept that balance of power while in Middle East people were not as independent and went with the herd.

So yes, saying the Catholic Church ensured the Scientific Revolution is indeed appropriate.

In fact, (another tangent) the Muslim world during the Islamic Golden Age (600 -1200) was incredibly scientific, intellectual, and open minded. Yet, over time their priest class made this deviation: that Allah created the world, therefore you should study Allah instead of the world since he was above it. The Catholic Church and its affinity for empirical science laid the foundations of the modern world we enjoy today.

As important as systems and institutions are, they are fundamentally shaped by your society’s culture and worldview. The society’s mental framework of reality, the worldview, has a huge influence on your systems and institutions. The other massive influence on culture is from your source of mass and energy.

was hunting you down for heresy. because both the Catholic Church and Muslim world were scientific, however around 1200s remained scientific while the Muslim wor

the outcome was so different for the Islamic and Hindu The Muslim and Hindu priest class did not share

“Ensuring” is indeed the appropriate term since the priest class in other civilizations thought the opposite. Without the approval of the most powerful institution in your civilization, there would be no scientific discourse during the renaissance. It would have been heresy to discuss science during the Enlightenment. Historical evidence from the Muslim world and Hindu speaks for itself.

The belief that the universe was **created by a rational God** encouraged the idea that nature operated by **discoverable laws**.

The *Catholic Church itself* became a primary, enduring *institutional engine* training generations in the disciplines that fed the Scientific Revolution. In the Islamic Golden Age, *religion-friendly patronage* certainly enabled high-level science, but the *core religious school (madrasa)* did not integrate the natural sciences to the same depth; instead, courts, observatories, hospitals, and private scholars formed a more *patchwork ecology*. It was permissible or commendable, but never seen as a form of worship.

People hear the muslims invaded Spain the 700s and just rememver that fact without making any connections why that particular date makes sense. The 700s was during the the Islamic Golden Age and a period of conquering by the newly Muslim invigoration the power difference between Europe and Middle East was wide. This is the gripe with history, they just spew out dates with almost no context to why that makes sense in context to what was happening to the rest of the world. Human civilization and inputs are a series of connections and inputs and outputs.

It’s amazing how modern people see Christianity as oppressing against women when women were the first mass adopters of Christianity because it gave them so many more rights and privileges than what the broader society allowed them. I sound like a Christian at this point but im not, I just praise good systems and institutions when I see one.

The whole stint with Galileo **Selective, High-Visibility Cases** (Galileo, Index entries) produced **symbolic chilling effects**, prompting cautious rhetorical strategies (hypothetical framing, deference formulas).

Islamic golden age: (Can also use what happened during the Islamic Golden Age (600s - 1200s) as an example but that’s another tangent)

How Muslim Intellectuals Deviated From Science Tangent:

Most people don’t know this, but the Middle East experienced an Islamic Golden Age from 600 - 1200. During this time Islamic civilization was incredibly intelligent, scientific, open minded, capitalistic, and the most gender equal at the time.

They had great schools and open discussions and were great in math and empirical study of the world. However, they started deviating around 1200, and became less scientific and cared less about the objective world. They started to believe that Allah controlled the world, therefore studying Allah and not the world. They believed that fire doesn’t burn things by its nature, Allah causes the burning each time. A rock doesn’t fall because of gravity, Allah makes it fall. Al‑Ghazālī says (paraphrasing): we *observe* that when fire touches cotton, burning occurs; philosophers then assert a *necessary* connection. He replies: God could prevent burning (as with Abraham’s miraculous preservation from fire in Qur’ān 21:69). **Therefore** the link is not *logically necessary* Therefore, seeking **natural laws or consistent physical causes** was seen as unnecessary or even **presumptuous**. Allah made the world and is in control, therefore don’t study the natural world study Allah and his will. This gradual change in worldview changed the trajectory of the Muslim world’s scientific and productive output.

Basically by 1100 AD the Muslim world was more scientifically advanced than the Europeans and also believed in empirical evidence and discoverable truths. Eventually the idea that Allah created the world and controls all of nature, therefore study Allah not the natural world won out. Figures like

Thinkers like **Al-Ghazali** (1058–1111), a hugely influential Islamic theologian, argued:  
 👉 *“There are no natural causes. Allah directly causes everything, at every moment.”*

For example:

* Fire doesn’t **burn** things by its nature — Allah **causes** the burning each time.
* A rock doesn’t fall because of gravity — Allah makes it fall, directly.

South vs North Korea

Developing world

spanish/british systems in latin america

Muslim vs european world

* As mentioned earlier the catholic church’s fateful decision to religiously legalize scientific progress and the pursuit of truth is distinctly different from what other spiritual leaders touted. Muslims -> god is above the world, so why study the world when you can study god (obviously this was just a power struggle between the religious leaders and scientific engineering elites and the religious leaders won and religiously justified their higher status. You’ll see this dynamic alot, where these civilizational policies that set trajectories are just elite dynamic games. We can spot these in our modern era today but it’s not so easy looking back. For example if Trump says he wants to shut borders down completely, future historians would say our society just became more seclusive when really its just the result of a power struggle between the republican and democrat elites.
* Anways, the indian priest hood just took too much psychedelics and said dont leave india, nothing is real, dont write anything down and just built temples instead of soldiers when the muslims invaded.

(If you want to get into why the Ming dynasty was so repressive against merchant fleets and technology, the Ming emperors, especially the founding emperor Zhu Yuanzhang (Hongwu), believed absolute control was the only way to maintain stability. Zhu Yuanzhang was a peasant rebel who deeply distrusted elites, foreigners, and merchants. China’s long history of recurring cycles of unification and fragmentation is always in the minds of the elites. To survive

unified dynasties an. The Ming Dynasty sought to protect themselves from any threats from merchants, generals, or other elites and that’s why they were so repressive, a stark difference from the Song dynasty before it.)

it’s because the Tang dynasty right before it is infamous for political instability, emperors were constantly overthrown or assasinated. They went through about

The only thing stopping China from a full-scale industrial revolution were slight changes in culture, systems, and institutions. How we organize ourselves within our societies have such insanely divergent results

So if you trace back the improper set up of systems and institutions leading to political instability and uncertain authority that led to the Ming dynasty killing their Age of Exploration and Industrial Revolution they were on the brink of, so the Chinese stagnated while Europe rose and centuries later a couple British ships basically took control of China. You can trace all of these not by great individuals, geography, genetics or whatever but how the systems and institutions set up the trajectory of civilizations. Setting up systems and institutions should be the easy part, its just agreements on how humans organize each other and work with each other, the hard part should be actually working with mass and energy and making cities and making steel and distributing, those are supposed to be the hard problems because they actually take mass and energy expenditure. Writing some rules and agreements on pieces of paper costs almost no mass and energy yet influences the mass & energy outcomes so much. Systems and institutions and getting those right is probably the most impactful things you can do for civilization. We just have to operate like this because were a bunch of barely conscious monkeys.

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Random shit:

During the turns tabled phase, when talking about the modern world discuss our beliefs and morals are a product of the era we live in. How the west got PTSD from the world wars and lost its soul and is currently committing suicide. modern western culture is a direct rejection to nazi germany - our current culture discourages nationality, masculinity, aggression is bad, there is no superior or inferior culture, saying X group is superior is incredibly taboo, we are all the same, color blind, race blind. Also a great outlet to discuss how financialization helped kill the west and is civilizational heroin. Addicted to cheap money. The Europeans were right about mercantilism and as the world increasingly becomes multi polar it becomes obvious your nation’s wealth is highly dependant on how many and how well it can compete in different industries. England, the birthplace of the industrial revolution was down to it’s last steel mill which was supposed to be shut down but only saved by government intervention. What exactly is made in England now? Some highly sophisticated equipment, engines, and some things like that, but the English people have gotten poorer because there is nothing for the majority of them to make.

Just look at Singapore on Google Earth, its not supposed to be there, it should be an un notable plot of jungle but a couple of good decisions later its a prosperous city state. They were exceedingly good at organizing labor and resources into systems and institutions that optimized the civilizational outputs.

This is the first veil, fundamentally, civilization operates under biological principles.

Just make sure you include in the elite overproduction part and how when the catholic church decided to allow science, it was basically a bunch of dudes who really liked science and thought it was cool and just said “this is cool god allows it” and don’t forget how the muslim priest class and scribes banned their civilization back by banning the printing press.

* A dense mesh of conflicting elite interests.

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The biological view on human history

Imagine looking at earth from afar you see organisms grow iterate reproduce adapt evolve, then comes humans and they survive, reproduce, iterate, and evolve but socially.

The bottle neck for humanity has always been the way we organize ourselves, our culture. Ask anyone in AI today. What is the true bottle neck for ASI, is it truly going to be how fast scientists and engineers can improve algorithms and make chips, or how fast society can mobilize its resources to facilitate the ai revolution and ontop of that, adapt society to adapt the change. The shortage of energy/transformers in the USA isn’t truly engineering or scientific, but our systems and institutions and how they work. The real bottleneck of mass robots wont be how fast we can make them but how willing societies are in replacing jobs. In time, it will become increasingly obvious that civilization and culture are apart of the technology stack as well. The bottle neck for our species is overcoming our own monkey brains and find good systems and institutions that work well with maxxing these outputs.

Despite having a goal, people have different goals than what’s best for civilziation. Elite aspirations, living a comfortable life, or just taking care of your family. The immense success of capitalism was capturing everyone’s personal goals and diverting as much of it as possible to benefit the larger civilization.

The following writing is to better help you help humanity to be the best we can be.

The prime directive of civilization is to organize labor and resources into systems and institutions that optimize the scientific, productive, and human well-being outputs. I yearn for a future where humanity is fruitful and prosperous amongst the stars. A future where we finally master ourselves and learn to work with our own nature. Our society could be mobilizing its resources towards space colonization, lifespan extension, or abundant energy. We certainly could, but we’re not. Instead, probably over 95% of the mass & energy and intelligence humanity uses today is spent on maintaining society, while only 5% is used to progress it. You might’ve noticed by now, but our species is pretty lost and aimless. We haven’t figured ourselves out yet. We managed to attain civilization but we don’t know what to do with it. Most of the time it just exists aimlessly with no real purpose besides survival. We can’t even keep civilizations going for long. They constantly die out because we’re chained to an evolutionarily crafted, hardware defined human nature that hasn’t fully adapted to civilization yet. Although all things in the universe must abide by the rules of physics, our civilizations like to operate foolishly under false assumptions. We don’t truly understand ourselves or what systems and institutions are best suited for our nature. We’ve been trying to figure it out for a while now. We’ve had experiments with many different civilizations with different religions, social & political structures, and economic systems trying to figure out the best way to go about civilization.

This is a fundamental question all life tries to answer through evolution, what is the best way to organize mass & energy to do useful things for the organism/species? Civilization is no different and should be seen as nature’s local optimum solution to this problem. Graphs like the “Timeline of Human History” <https://usefulcharts.com/products/timeline-of-world-history?srsltid=AfmBOooVHrudi7G4Ui4_THvy-XSU3B1HB2C2xrAZFUMWOmPlhJ2GhG_c> is akin to an evolutionary tree. Single celled organisms evolved into multi-cellular, then plants & animals, and developed immune systems, eyes, brains, arms & legs. Likewise, human civilizations had their own evolutionary tree, where the civilizations formed traits in the form of culture, law, religion, social structures. Individuals learned to work together, form tribes, civilizations, then developed monotheistic religions, monogamy, Confucianism, Capitalism, Feudalism, etc. The civilizations that had good enough traits survived and reproduce while the ones that didn’t died off or were conquered by someone better. Civilizations were petri dishes that formed traits, tested them in the real world, and would adapt and change to fit their environment and compete with others.

We have deeply ingrained emotions and identity tied to the belief systems and ideals of our culture. One must always remember that if many different people in other eras of history had very different beliefs from you, then many of my beliefs must also be a product of the era of history and country I am born in. In deep retrospect, many of the beliefs I held as fundamental truths such as democracy, capitalism, equality, and such are not fundamentally true and don’t work all the time. These ideologies should be seen as tools and not absolute truths. Like any tool, they are best used to some extent under certain conditions. This the problem with civilizations, they are driven by blind ideology. When something is embedded into the essence of culture and belief systems there is no mechanism to regulate ideology from purity spiraling. Many ideology driven civilizations had no internal mechanism to say, hold on what we’re doing here is dumb let us readjust ourselves and remain pragmatic. They purity spiraled and so the Japanese thought they could beat the United States in WW2, Indian mystics decided that caring about the material is wrong and the spiritual is important so when Muslims invaded they built templed instead of armies,

. Democracy, capitalism,

There should be an engineering approach to civilization.

My hypothesis that you can test, is that the best way to go about human civilization even if we are highly enhanced and not anything like base-level humans, is to have the goal that civilization is to organize labor and resources into systems and institutions that optimizes the scientific, productive, and human well-being outputs. This is best achieved through an iterative process and plurality of power.

The series of civilizations and social and cultural development they’ve made is akin to an evolutionary tree diagram. Different civilizations evolved differently based on their environment, their source of mass & energy and predators. Some died some lived, and the ones still around today are the ones with the right evolutionary characteristics.

////We’ve accomplished the biological goal to survive, but now We don’t have a new goal. That was one the problems with civilization, what was the goal. ////

, most failed, but right now we’re doing the best we’ve ever have, but it seems that we haven’t been vigilant and entropy is seeping in.

Yearning for a world that doesn’t exist yet:

The Jews saw the decadence and severe act of the surrounding civilizations during the Bronze Age collapse. So they created rules and culture like the 10 commandments to help their descendants learn to organize themselves in a way that won’t fail like the others did. Their laws, religion, and social organizations are a direct response to and rejection of the ways of the failed Bronze Age civilizations. In a similar matter, the entire rest of the world sees the chaos in western civilization.

Human group culture probably works the same as vaccines. You introduce just a bit to disgust the population and they grow an immunity to such things. I think that’s why the western civilization fell so fast, they’re like the native Americans, our species had 0 immunization defenses for ultra fast urbanization and wealth. We just didn’t know how to deal with so much fortune so fast and we went crazy. I hope out of this other civilizations especially the eastern ones can see what went wrong, get a bit of the virus themselves, and then gain an immunity to such things AND MOST IMPORTANTLY, carry on these lessons. Teach younger generations what happened here and why. The information transfer must be pristine. Or else everything we learned in the past can be lost in a single generation. The key difference between our civilization in the future and before it’s that things are constantly changing. Before, things didn’t really change at all so you can create a set of rules and itll generally work out for a long time. But now things will be constantly changing and whatever set of rules you did have and thought were good will might suck. So the key thing is adaptability. Whatever rules you set for society, whichever way you organize labor and resources into systems and institutions to optimize the scientific, productive, and human well-being outputs, it must be adaptable. You must be able to have a quick iteration loop where you monitor weaknesses or failure points, come up with a solution, quickly implement, and run the environment. Of course, by doing this you run into the danger of iterating towards a local optimum, or the iterations get so small it’s useless and more painful than it’s worth, in that case you are better off with redesigning the whole thing from scratch, much like how chip designers often did. Jim Keller thought you need to start from scratch every 5 years. You probably need to occasionally do the same for civilization, not every 5 years but for some amount of years. The eastern civilization has just gotten rich so the decadence and degeneracy is now starting to creep in. All of the elders know what it’s like to be truly poor, suffer hunger, and most importantly, war. They are the strong generation who created good times. The young now are in danger of serious degeneracy & decadence much like the west. I think as long as the old guard is around, so another 10-20 years the degeneracy won’t spike. But it is coming, unless society makes a serious effort to inoculate themselves. For example Tokyo Kids are teens who run away from abusive homes, form groups, do drugs, teenage girls prostitute themselves and share money with the boys. This is actually happening right now.

To think the title ASI is strictly meant for silicone artificial intelligence is a misconception. People today use the term ASI as if humans are done evolving. As if it's science fiction to enhance ourselves. Although I am writing “To ASI” more for myself than for a reader, it is for a timeline where we humans have enhanced ourselves to be the ASI. The reason people today hope ASI will be this all knowing non-human entity that will lead and guide us to utopia is because we still fundamentally operate in an Abrahamic worldview. That we are helpless silly little humans who can only get to utopia by following god and his divine laws. Granted this worldview has been true and likely will remain true for a while due to the realities of human nature. But the time is coming when we will break free from our evolutionary biology and genuinely change human nature. Then we will truly experience free will. That will be a new world. Everything we knew about civilization, our relationship with society and each other, how we get our mass & energy, and what to do with mass & energy will have to be rewritten. ASI will be ourselves and we will build our utopia by human will. So to reach this goal, the prime directive of civilization is to organize labor and resources into systems and institutions that optimize the scientific, productive, and human well-being outputs.

Humanity

Throughout human history, what truly mattered? I’m sure so many people thought so many things were important.

A at

Youre trying to be too grandiose and serious and cool. Just free flow write like how you usually do. Something is different between your ntes and v1, youre trying to be too precise and accurate and right. Youre not writing a text book youre just writing your ideas.

The prime directive of civilization is to organize labor and resources into systems and institutions that optimize the scientific, productive, and human well-being outputs. In other words, the best thing a group of people can do is organize themselves in ways to get mass & energy and do useful things with them. Throughout the course of human history most civilizations didn’t have a higher goal

Gauging the scientific, productive, and human well-being outputs is the most pragmatic way to measure a civilization’s progress and prosperity. It’s also a useful tool to determine what course of action a civilization should take based on pragmatic metrics. If a civilization had a light in the sky that turns green or red, judging every decision a civilization makes as a net positive or net negative, it would be very useful. Too often policies are determined by ideology or special interest groups. How this makes me feel and if this makes me richer. A better standard would be judging every policy based on its net positive or net negative impact on civilization based on its effect on the scientific, productive, and human well-being outputs of society.

///going to fast explain more///

Instead of bought out politicians and chin stroking economists trying to convince the population trickle-down economics works based on vibes and sound bites, it would’ve been much more pragmatic to measure its effectiveness based on the scientific, productive, and human well-being outputs for civilization. Instead of offshoring the manufacturing base for balance sheet maxing, it would’ve been much more sensible to take into account the effects of the scientific, productive, and human well-being outputs. Instead of hyper financializing the economy and misdirecting many bright minds into financial services, the overdose of easy money and misallocation of talent would’ve been caught sooner if society monitored the scientific, productive, and human well-being outputs. Instead of GDP maxing and making housing take up more than ½ of income, price gouging healthcare until it became unaffordable without insurance, then jacking up insurance rates, and marking up education until it became unaffordable without loans, it would‘ve been nice if civilization had caught wind of these trends decades ago and made policy supporting or opposing such trends based on its effect on the scientific, productive, and human well-being outputs of society.

///too fast, slow down///

In reality, the elites make most of the meaningful decisions in a civilization, not the general population. Whether it be the established elites or the rising elites, nothing really happens unless some of them push for it. Yes, a ⅓ of the colonial population wanted independence from Britain, but it only worked because some of colonial elites, like the founding fathers, wanted independence as well. If there were no colonial elites who wanted independence and it was just ⅓ of the population rebelling , it would’ve ended up being a peasant revolt that’d probably get shut down by the ruling elites. Google “successful peasant revolts” and you’ll see they have a very low success rate. These sort of things are usually successful only if some number of elites are backing it.

Deep elite splits are one of the pre-conditions that reliably precede large-scale rebellions. The vast majority of successful revolutions, civil wars, movements, reform waves, or anything notable, really, usually hinge on defections or active sponsorship among people who already hold sizable control of resources, institutions, or influence. It’s very useful to view these events as elite competition, especially the struggle between the rising and established elites.

The rising free trade merchants, Parliament, and Puritan reformers vs the established monopoly merchants, monarchy, and Church of England during the English Civil War. Elite aspirant bourgeois professionals (especially the lawyers), younger liberal nobles, merchants & bankers, and lower ranked military officers vs the established court aristocracy, high Catholic clergy, high ranking generals, and monopoly merchants & traders during the French Revolution. Local Confucian landowners, free trade merchants, Han White Lotus/Red Turban religious elites, and Han militia officers vs. the established Mongol court, monopoly merchants, court Buddhist, and Chinese nobility benefiting from the Mongol system during the transition from Yuan to Ming dynasty. Rising religious elites, wealthy merchants vs Protestant monarchies vs Catholic monarchies vs territorial princes vs the Catholic Church during the Protestant Reformation. ///I want a Christianity spread in rome example///

Elite dynamics determine the movement of civilizations.

Thus, 99% of the population is irrelevant. The most they can do is collectively spawn some kind of emotion that the elites that can use to garner support for their endeavors.

popular mobilisation was essential but not sufficient. What finished the job was:

It’s all so arduous, how we are at the whims of elites and their inter elite completions. It’d be so much nicer if the movement of society was based on improving the scientific, productive, and human well-being outputs of society.

Biological organisms tend to these outputs are very similar to organisms. If a collection of cells found a way to organize themselves into a digestive system, or brain, or heart wouldn’t that be considered a technology. If we managed to create these things that would be a technology. So cells do the same thing they organize their “labor” and resources into systems and institutions that optimizes the scientific, productive, and cell well-being outputs. This is truly the point of civilization.

The biggest bottleneck civilization faces now are no longer if we have enough mass & energy or the right technology. The bottleneck today is how effectively we organize ourselves in systems and institutions to do things. The bottleneck for civilization today is our culture.

The most blatant example today is North and South Korea.

Despite We seriously suck at forming the right systems and institutions,

If you were in charge of a Stone Age tribe in 4000 BC, what series of actions would you take to develop that tribe into civilization like ours today? It’s a similar question if you were a single called organisms what series of actions would you take to develop into a human being today?

The bottleneck in our civilization today is not how much mass & energy

Organizing labor and resources into systems and institutions.

One of the greatest weaknesses of a civilization is its inability to adapt once its culture and systems and institutions become solidified.

Iteration and plurality of power.

Competition

Parameters on ideology

It’s safe to say the majority of mass & energy gathered by civilization today is used inefficiently.

We can say the biggest difference between the United States today and let’s say, a Stone Age hunter & gatherer tribe, is their group of people’s scientific, productive, and human well-being outputs. They just didn’t have the excess mass & energy needed to do anything else really. So we can say they were mass & energy constrained to produce much of any of these outputs.

Same goes for the ancient Egyptian, ancient Chinese, Greeks, Romans,

Implore deeper how these civilizational outputs prevents entropy by giving civilization a goal.

As far as we know, this universe consists of properties presenting itself as mass and energy, and the laws governing how they interact with each other. When a structure of atoms becomes conducive to getting mass and energy and using it in ways to propagate itself, we call this phenomenon life. The reason why life, or anything at all, emerged is up to your personal belief. Through the Lord’s will or by emergent properties, one way or another life emerged and the ones still here today, concerned itself with survival and reproduction because the ones that didn’t, simply ceased to or never existed. Being at the right place at the right time to facilitate life, Earth teemed with intercompeting species fighting for mass and energy, and learning better ways to use them. There, we emerged.

We came about when our specific pattern of atoms was able to use mass and energy in ways to propagate itself, improve itself, get more mass and energy, etc. Basic organic functions. Again, all organisms on Earth have these basic functions because the patterns of atoms that did not do this died off. If Earth was a PvE server, we might’be been able to end it here. However, Earth is a PvPvE server. In our finite world, organisms must compete with members of their own species and other species. When everyone else gets better and better at getting their resources and propagating, if a species does not adapt and improve improves itself, it will get less resources and propagate less. So the cheetahs got faster, the giraffes got taller, immune systems got better, our brains got better, etc. This is simply what happens in a PvPvE server and the ones that did not adapt and improve died off.

All of the traits and characteristics we developed that were good enough to help us survive or weren’t bad enough to kill us off were encoded onto our genes. This information largely determines all of our physical characteristics, including all the structures and systems of the brain or anything else associated with it. Since the structure of neurons, system of neurotransmitters, regulation of hormones, etc are all largely formed by genetics, and all cognition comes from the dynamic interactions between them, much of human nature is hardware defined. Our 5 senses are hardware defined. If I’m seeing or hearing something, I literally can’t turn it off even if I wanted to. In the same way, if the right emotional buttons are pressed, I literally can’t stop feeling love, fear, anger, sadness, joy, the need to mate, etc even if I wanted to. We can only suppress it, convince ourselves to ignore it, or not act on it, but we will always feel it to some degree. While these are some of the most primal parts of human nature we developed to help us survive and compete, as time went on we found the benefits of working together and community as a new local optimum to get mass and energy.

Thus, human nature changed as selection pressure preferences for hardware went from just animals to social animals. So now, social inclinations and traits are ingrained into us as much as the primal emotions. Loneliness, community, fairness, reciprocity, authority, compassion, betrayal, trust, friendship. These aspects of human nature formed during our time as tribal hunters & gatherers. This new local optimum, which was our specie’s state of the art tactic to help us get mass and energy, drives most of the mechanisms of our civilization today.

Culture doesn't exist with just one person. Culture only exists when there are multiple people and so only emerged after we became social then tribal. Once you have multiple people working together in groups there needs to be a shared idea of what we’re doing and why. For a tribe, it’s working together to get more mass and energy than we’d get ourselves, help each other out, fight predators, and win against other humans. It’s a pretty great new local optimum our ancestors found. It probably wasn’t easy at first, because the first ones to do so were probably literally monkeys. But they’d soon run into the problem, that they are monkeys and it’s hard to get monkeys to work together when you have a bunch of limbic system primal emotions like fear and anger. So, a culture is a great way to get different nodes who inherently care more about themselves and their offspring a lot more than the group, to work together. For humans, culture answers: What is the truth and the framework of how the world works, how to get our mass & energy, what to do with mass & energy, how to allocate it, and how to stay together as a coherent group despite our limbic system impulses. So from there you form ceremonies to do activities together to feel like one group, you have social hierarchy to organize people, you want to transfer information from one generation to the next so you form pantheons and myths, time to time you’ll have a shitty leader who will tell the population to do dumb stuff so you have culture and religion to convey wisdom from the past to keep the tribe in the right course. Let’s say the river floods once every 200 years. You get wrecked the first time, then you say the gods do it and you form a culture to reflect that, 190 years later a leader comes in says let’s live closer to the river so we don’t have to walk far for water,, the people say no the gods say no and our culture of keeping the water holy and untouched must be maintained, no one listens to authority despite being predisposed to obeying authority, it acts on information passed down from the far past, doesn’t live next to the river, river floods and no one dies. This is essentially where myths come from. So if you’re going to operate on an authority hive mind structure, you have counterweight to the occasional stupid leader by the wisdom of your ancestors. As tribes formed to clans and then civilizations, these myths started to encompass morality and how to behave yourself. Then when there were too many conflicting godsam all telling you different things, monotheism came in and others during the axial age.

Civilizations are not easy to form and didn’t just come about as a natural progression of things. Things don’t have to progress. We still see small organisms, bacteria, etc that never evolved into anything else. There had to be a very good reason to get a bunch of nomadic hunters & gatherers to become settled peoples. Farming is much harder, the fields of the crops couldn’t have been that great at the time. There’s a great quote that we did not domesticate plants, they domesticated us. Now there’s an argument it was religion. There’s an argument it was irrigation for water. I personally believe people don’t really change their entire way of life unless they absolutely had to, so my guess it was vital for how they get their mass and energy. So I like the water irrigation argument. So this is the new local optimum for getting our mass and energy. Growing plants. Once farming got good, the population grew. There was even excess mass and energy. Then some of the smarter ones realized they didn’t want to work hard on the fields all day, they wanted others to do it for them and still eat but not be called lazy or parasites. So they used our tendency to adhere to authority, our need to organize and work well together, to become priests, or scribes, or land owners etc. The smart ones do not want to be farmers. Then you have social classes and elites and greed. Meanwhile, we still have that limbic system, primal emotion hardware, that never went away. We have these newfound social and community aspects of human nature. So you see greed, envy, seeking status, group approval, ambition, etc. So now forms some of the most important factors that drive populations that’s actually the same stuff we’ve been doing as animals and tribes and now: How much mass & energy a civilization produces, what to do with it, and how to allocate it. That is why we became tribes and civilizations and formed cultures in the first place, it’s fundamentally because we believe we are better off working together than working alone. So when there is not enough mass & energy to go around, when there is enough but the social elites hog it all, it’s not distributed well, and amongst the social elite they don’t like the distribution either, or when people feel like they’re not benefitting from he civilization, when they feel like they’re putting more work than others, if civilizations diverges in culture and now we don’t agree on things, civilizations come under stress because people question subconsciously the underlying principles of civilization.

I am 100% driven by spite and insecurity along with passion and purpose.

Culture is the shared framework of what is true, how to get mass and energy, what to do with mass and energy, and how to allocate it.

Culture revolves around your source of mass and energy and is the guiding system on how to use and allocate them. Instead of

Animals can do services for us and don’t take money. So there is some possibility for nature to come up with structures and systems for us to work together and do things for each other with little concept of property rights or whatever. Sure, im sure there exists some possible pattern of mass and energy where this can be naturally possible. I mean I think trees share resources and stuff. But we did not evolve this way. This is not our evolutionary tree and we don’t have the technology to change our nature. It’s not a society or social construct problem, its a biological/physics problem. So stop trying to change our society for your delusions you marxists.

Have

There is literally nothing we can do, only suppress it or convince ourselves to ignore it. But we will always feel it.

Physics -> biology -> human nature -> hunter gatherers & their culture -> civilization & its culture

Were monkeys trying to make civilization work.

Emotions like love, fear, anger, sadness, etc are so deeply embedded within us because these emotions are the adaptations we developed to help us survive and compete. They were developing before we were even human. Because they are hardware defined we couldn’t turn them off even if we wanted to.

The mechanisms allowing us to feel these emotions are defined by genetics, thus are hardware defined

Until recently most human medicine or psychology or economics or media or movies, or writing, or whatever basically tries to provide inputs to innate human biology or human nature to get the output we want. For example vaccinations works with our biological systems. Stem cell treatment works with out biological systems. Most medicine uses some part of a premade biological system and uses it to our advantage. The only medicine that is not is something like surgery.

The woke left was anti mother and anti childbirth, if you were young between 2010-2020 don’t even try to deny it. We were all there. It was very subtle but you know in your heart they were trying to discourage motherhood and childbirth. You know it. Just look at the people who don’t like t

It wasn’t some special diet why some teenagers compete at math olympiads and others do not, you just had to be born with it to compete at their level at their age. Do you think this differentiation just magically disappears in schools. There is always

Babies learn their behavior. From a few months to 4 or 5. Imagine a video camera thats just on you and then takes all the sound and video inputs and influences the development of the baby’s brain. We think just because they cant talk or think they don’t know what going on but how you behave, if you seem violent or calm or use loud voicse or how you react to things. They 100% internalize them and some internal brain mechanism adjusts the developing brain to fit the environment. If you have a low stress tolerance and start to crash out even a little bit like a dropped plate or yelling at the tv when the team scores. Your baby has internal mechanisms to wire its brain as it develops to react and do similar levels of stress tolerance. 1000000% chance. So when you have kids never act scared, never act anxious, never yell, etc. Your child is a camera to its developing neural network and will internalize and change its brain to any and all visual and audio inputs.

When I am by myself I do not have a culture. When I am with others there is a culture. Culture is our system to get mass and energy and what to do with it.

Even if you argue the environment can literally shape our brain and neuroplasticity, its wishful thinking on display. Any way the brain rewires itself due to any environment is determined by the innate algorithm determined by genetics. The way the brain changes itself when in response to the environment is determined genetically. The mechanisms underlying neuroplasticity is determined by genetics. Yes you can work out and eat and what not but the mechanisms of how fat builds up

and this is controversial in my time, but determines you psychological characteristics as well.

Human nature as we know it today formed after some time as a good enough way to get mass and energy and do things with it in a competitive, PvPvE environment.

Human nature is hardware defined and drives most of your daily life, your beliefs, your actions, almost every second of how you spend your time on Earth is derived from human nature. It is unequivocally the fundamental building block of human civilization. It’s core mission, risen from the necessities and struggle of survival and competition, is to get you to do things based on inputs from the environment. The red pill is that underlying mechanisms have more command over your life than you’d like to think.

We are barely rational, we operate like a instructor vehicle where we have control and drive around but something else can come in an override our controls.

One of the flaws of Abrahamic religions it pushes the view of a soul or a self that has command and queries the brain to do things for it. When in reality it is the other way around. It is becoming increasingly clear that humans are barely rational

Culture is the most important differentiating factor for human civilizations. Not weather, not genetics, not environment. Culture is today’s bottle neck.

Why did we lock down, elite dynamics, why do we get swayed into war, why do let politicians run our country to the ground, etc.

Physics -> Biology -> human nature -> culture

These might be very obvious examples, but these mechanics are how you live out 90 - 99% of your time every day. Humans are barely conscious and rational.

The need for community, love, empathy, compassion, status, greed, tribalism,

In the process of getting mass and energy and intercompetition, we unlocked traits in our culture tree in a highly social direction, and it ended up working really well for us. Human nature

Then we got smarter. Rumor has it someone ate something that made them smarter and know the difference between good and evil. Morality is a human construct.

Now, to the extent of improvement we see today is remarkable. There must be something we’re missing or not understanding because the brain, eyes, immune system are really really good and its unbelievable to think these things can emerge on its own with out selection pressures.

Earth is a PvPvE server. It is you

Cultures revolve around your source of mass and energy and enemies much like animals evolved around their source of mass and energy and predators. The Asians are Asians, the Europeans are Europeans, and middle easterners are middle easterners despite stemming from a common ancestors because over time these groups of humans have evolved biologically and culturally to optimize for their source of mass and energy, their environment, and enemies.

Have we ever sat down to think how the state taking 30-40% of your income is insane. On a historical level this is extremely high and we’re just ok with this? The state and bureaucracy has clearly gotten too powerful.

The reason why civilizations lose is because they win for too long. Same reason why even if you win and become a billionaire your kids can be spoiled rotten. If someone wins the bodybuilding world championship they can stop working out and eat junk food all day. If its already hard for you to remain disciplined, to not be arrogant, to keep working out and going to the gym, if it already so hard to stay wealthy from generation to generation, for companies to remain on top over decades. It is way way harder for winning civilizations to keep winning because its people stop going to the gym because they think theyve won. Population forge tabout the morals and lessons and the systems and institutions that got them there in the first place.

So we can see when trying to accomplish something we have to operate at the highest abstraction levels of the dynamics human group systems and institutions having difficulty talking to the physics layer. Like different layers of the stack have trouble talking to each other it gets really complicated. So you have this system where people need to operate from the highest abstraction layer of human institutions and systems to work with individual psychology and economics to work get our biology to work with physics.All the meanwhile all the nodes having extremely limited information bandwidth and throughout and limited cognitive ability while constantly interchanging the nodes who face information loss at every change leading to intense information loss and decay over generations so leading systems and institutions degrade in quality within a generation. It’s madness.

There’s so many barriers to progress established by ourselves.

Most people were just doing things that they felt was right and sometimes they happen to be the right choices to make progress happen, but it was mostly accidental and through self belief.

Thank you, please, it’s ok are words the woke don’t have in their vocabulary. Mr Beast donates water wells to thirsty Africans and provides maintenance training. Magatte Wade: “if Mr beast genuinely wants to help Africa, he could direct his enormous resources and influence toward enabling African solutions rather than importing western ones”. Basically, fuck you white guy. FYI I’m not white, but how are you supposed to take these people seriously. Literally what incentives do you put in place to get certain demographics to like your side. It’s insane and if you’ve taken the red pill and out of the matrix, you’ll see how utterly insane our era’s ideologies and principles are. No thank you, no please, no manners. They don’t deserve anything, only act as plagues hampering the rest of us from manikin’s progress. They will be stopped, and their degeneracy studied well to prevent it from happening again. Oh by the way, that entire video is fake. Completely fabricated. Why do you rbi k the best journalists are going solo with their own channels. Why am I supposed to believe anything you have to say establishment?

History should be one of the most important topics alongside math/science because there are a series of things the people in a civilization did to win or lose. The Muslims did something to win 600-1200 then did stuff that made them lose after. Europeans did things that got them the Industrial Revolution, agricultural revolution, and scientific revolution, then are doing things making them lose now. A population, especially a democracy, needs to m is the factor of things that goes into making and sustaining a successful civilization and what things make a civilization lose. It’s such a basic concept that should be as vital as knowing the periodic table or reading a book. How did we ever think its ok to have a democracy, but not educate its people what’re the factors that goes into winning or losing said nation you vote in? Is this not insane, that people have no idea how the Roman’s, Muslims, Europeans, Chinese rose and fell and yet are expected to make good decisions in their own civilization? It’s like given a car to drive but you have no idea what makes a good or bad drivers. This is why you want good players in your team, you can not allow bad players to come in or stay. This is a competition and we want to win.

If it’s true that the civil war was fought over slavery, that means there were a lot of northern American that honorably fought in the civil war were much more brave and social justice then you putting pronouns on your bio.

Academia has no real competition within it just rivalries, everyone has to be nice to each other and be in group, can’t start too far from consensus and progresses in these smaller steps. Old habits.

Covid was the greatest example of herd mentality and future generations will laugh at our hysteria. A 0.01% fatality rate pre vaccine amongst an obese, sleep deprived, and mentally unstable society. It was nothing, and the hysteria and mob mentality was so strong even North Korea quarantine and ANY and I do mean ANY criticism or the elite’s and academia’s word was seen as heresy. It really opened my eyes that we live in a highly centralized bureaucratic society where information is controlled by a few, not unlike Soviet Russia or the books I read on Fahrenheit 451 or George Orwell 1984 which were part of the school curriculum. Ontop of it all the elites were incompetent and clearly had no mechanism for truth, only group conformity. I wonder how many doctors and scientists refused to speak out against the unnecessary prolonging of lockdowns because of their career, their institutional reputation, and etc. 2020-2021 broke the cultural veil and when many took the red pill and edited this bureaucratic matrix. That the established elites, you are hysterical, you don’t pursue truth, and have no mechanism to admit that you’re wrong. I still haven’t heard an apology from the CDC. Then it makes you wonder, what else have these conformists mislead us about. If these same class of people were this wrong about disease what else could they be wrong about? Turns out its not necessarily that some research are outright false, thank god, but likely severely hampered, it’s just not good research. It’s like when. I am not a scientist but a monkey can see bureaucracy and the stifling air in parts of academia. A non famous academic can not get funding unless the research is within a comfortable distance from consensus.

They can’t tell their own people when to stop.

The Matrix is our era of civilization’s false beliefs of reality because we got too rich. Have you seen these photos of different prison cells in different countries. These images are only confusing if you’re still in the Matrix and believe that all people are the same and there is no innate differences between people regardless of race, culture, and genetics.

Another crock of shit is that relationships and marriages are 50/50. Pretty profoundly stupid and can only have stemmed from Communist beliefs.

Life is rare, intelligent life even rarer, and civilization excruciatingly rare. An enlightened, thriving civilization might be the rarest phenomena in the universe.

Each structure of matter, from no structures to organized life are different local optimums.

That is our origin, emerging from endless struggle and desperation to win.

1848 revolutionary hot spots across europe : photo

1930s communism movement in america, but not very popular or super influential.

The grand story of the human race is, like any biological organism, about getting mass and energy and doing useful things with them. The trend the past few thousand years and why we enjoy our modern standard of living, is we got more and more mass and energy, and used it in better and better ways to better our understanding of the universe, to make more and better things that we want, and make us live better lives. The first local optimum is doing what every other organism is doing to barely survive and reproduce. Then we found a better local optimum with agricultural based societies after going through several generations of water crises that forced our ancestors to settle down and irrigate rivers. Then after a few thousand years we broke out our non-progress loop through the scientific and industrial revolution and now we find ourselves in our current local optimum and current scientific, productive, and human well-being outputs. Each step of the way we found new systems and institutions that better served our needs. We may not have evolved as much biologically the past few thousand years but we have significantly culturally. What’s the difference between a stone age society, vs the ancient Egyptians, vs the ancient Greeks or Romans or Chinese or Ottomans or British to our modern civilizations? The main differences as you may now guess, is the difference between our technology, scientific knowledge, the advanced products and services and the quantity, increased lifespan, likelihood of a violent death or disease, infancy mortality rates. The cultural technologies to maintain civilization and prevent information loss. Culture of civility, the belief of progress and improvement.

I gave myself purpose because I am alive.

If you were transplanted onto a Native American tribe in 4000 BC, and you were immortal, what would be the series of steps you’d have to take to develop this group of natives into our civilization today? (aka the starting scenario of Civilization games) Essentially you’d want to organize the tribe into systems and institutions that will most effectively use labor and resources to dramatically increase the scientific, productive, and human well-being outputs. Peering throughout human history,

Peering throughout human history, most civilizations didn’t really do anything meaningful. Most were just trying to survive. Some managed to conquer their neighbors, build a few nice monuments and cities, maybe a few chads emerged and did cool stuff, and eventually fall. 99% of the mass and energy, intelligence, and labor exerted by humans for thousands of years before the Scientific and Industrial revolutions did essentially nothing to really progress mankind in any meaningful way. For the longest time our species was just trying to survive. We were stuck in this loop of non-progress for a really long time. Most species on Earth are currently stuck in this local optimum. Then through water issues and the need to work together to irrigate rivers we started farming and iterated to a new local optimum that is agriculture and then civilizations. Then we were stuck in a non-progress loop for a few thousand years again then found a new local optimum with the scientific and industrial revolutions. That is when our scientific, productive, and human well-being outputs really started to increase in a meaningful way. This is what is truly important. Imagine people in ancient Egypt, China, Romans, whoever. Imagine all of the little stuff they must’ve talked about or done. How many of that actually ended up mattering? So many people thought so many things were important. When really the only meaningful thing that mattered was are you tangibly increasing the scientific, productive, and human well-being outputs. This may be an incredibly utilitarian view and soulless, but if we became very advanced and searched and found various underdeveloped intelligent life, what metrics would be use to describe their current level of development. We would measure their current scientific level and the rate it is changing. The level of engineering, the products they are making in what quantities, and level of industry, basically industrial output. Then maybe the level of civility, ability to work together, death rates, crime rates, nutrition rates, just general metrics of their specie’s well-being. I mean this is honestly an accurate way to measure developing countries today. This is what really matters. This is what really makes a difference. Yet even today, most of the mass and energy, thought, labor and actions done by most people today are not doing anything tangible to increase our scientific, productive, or human well-being outputs. How many people will just live, die, and not really make a difference aside from having children? We are still maybe at sub 10% of all mass and energy exerted by humans that goes towards increasing the scientific, produciotve, and human well-being outputs. Most of our society is still geared towards maintaining society, while very few of us act as the tip of the spear. A good metric for a civilization, ours, a developing country, or aliens would be to see what % of all mass and energy exerted goes towards tangibly increasing their scientific, productive, and human well-being outputs.

Law, property rights, currency, markets, the scientific method, Capitalism, strong family units, a culture of individual endeavors

Strong family values, a culture of progress, individual endeavors for the good of society, currency, law,

The ensuing economic, political, cultural, social,

to dramatically increase their scientific, productive, and human well-being outputs

Many religious, philisophical, political, and economic system throughout human history was ultimately about improving at least one of these outputs.

The main bottle neck our specie faces today are is how we organize ourselves into systems and institutions not longer , but how we organize ourselves into systems and institutions to do things. Our technology has largely outpaced our culture, social systems, and institutions’ ability to wield it effectively. They are now in desperate need to catch up. This is genuinely a serious problem. The reason why Californian rail projects, Boeing planes, the healthcare system, and various third world countries are failing is largely because of our specie’s awful trackrecord of maintaining competent systems and institutions through time largely due to information loss. Human systems and institutions are just not good at scaling, suffer from information loss after a few generations, and have largely improved mostly through \_\_\_\_ unintentionally setting rules based on the benefactor at the time \_\_\_ and it just so happened to work for Europe to spark and maintain the industrial and scientific revolutions.

It’s 100% possible to do these things well and the fact we aren’t living up to what’s possible is holding us back so much. That’s why we have these rough civilizational cycles of rise, peaking, then gradual decline with self correcting and self regulating dynamics revolving around population growth and the distribution of resources to the population. The that distribution is good, things are good you know, the mass and energy is going to the right places to keep the civilizational machine running smoothly. But it always eventually goes bad. The ability to maintain it degrades, some through information loss but almost always by the faults in our nature. Wealth disparity gets too high, wage stagnates, elite overproduction. Peter Turchin and David Hackett Fisher do great work around this topic. These civilizational dynamics have been ongoing throughout human history and is precisely why western civilization finds itself in this climate today.